# Beta-Hydroxy- and beta-aminophosphonate acyclonucleosides as potent inhibitors of *Plasmodium falciparum* growth

Thomas Cheviet, Sharon Wein, Gabriel Bourchenin, Manon Lagacherie, Christian Périgaud, Rachel Cerdan\* and Suzanne Peyrottes\*

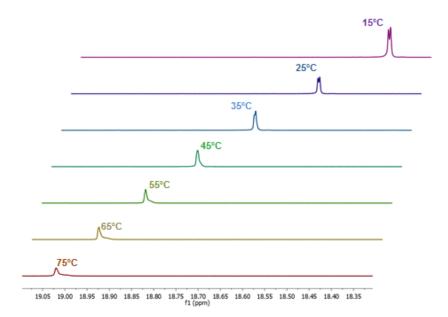
# **Table of Contents**

Preparation of NMR samples	page S2
Optimization of the stereo-discrimination by using <sup>31</sup> P NMR (Fig. S1-3)	pages S2-S3
Synthetic pathway for compound <b>11b</b>	pages S4 – S5
Spectra for final compounds (1-10, 11a-b, and 12-13)	pages S6 – S53
Copies of <sup>1</sup> H NMR, <sup>13</sup> C NMR, <sup>31</sup> P NMR, ESI-MS or HR-MS, and HPLC	

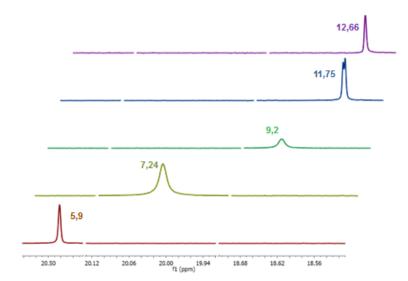
## Preparation of NMR samples.

10mM of the studied compound were dissolved in 100mM  $\alpha$ -cyclodextrin solution in D<sub>2</sub>O (ratio substrate/CSA was 1/10). NMR spectra were recorded at different temperatures ranging from 15 to 75°C. Small amount of NaOD or DCl were used to reach the pD of interest.

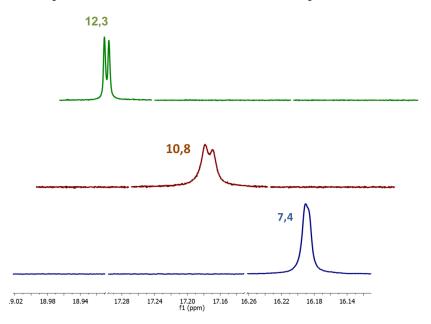
**Figure S1.** <sup>31</sup>P  $\delta$  variation of racemic mixture of  $\beta$ -hydroxyphosphonates according to the temperature of analysis, at pD 11.7. Separation of enantiomers were visible at 25°C and 15°C, the best separation was observed for 15°C.



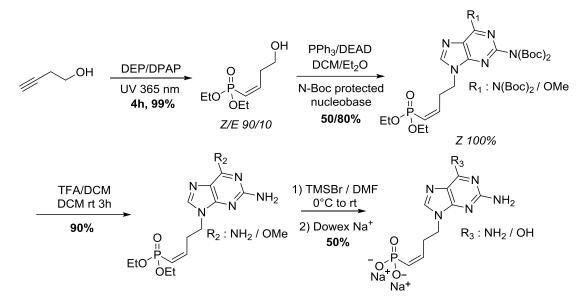
**Figure S2.** <sup>31</sup>P  $\delta$  variation of racemic mixture of  $\beta$ -hydroxyphosphonates according to pD value, at 15°C. Separation of enantiomers was observed at pD 11.75, but not at higher or lower pD.



**Figure S3.** <sup>31</sup>P  $\delta$  variation of racemic mixture of  $\beta$ -aminophosphonates according to pD value, at 15°C. Separation of the two isomers are visible at pD 10.8 but the best result was observed at pD 12.3.



#### Synthetic pathway for compound 11b



#### Diethyl-(4-hydroxy)-but-1-en-1-yl-phosphonate.

3-Butyn-1-ol (20 mg) was dissolved in a glass vial (diameter : 1 cm, thickness : 0.65 mm) with diethylphosphite (100 eq). Then, 2,2-dimethoxy-2-phenylacetophenone (DPAP, 0.5 eq) was added and the reaction mixture was stirred under UV activation (UV-A lamp,  $\lambda_{max} = 365$  nm, 4 x 15W tubes; vial located 2.5 cm away from the lamp) for 30 min. The reaction mixture was diluted in ethyl acetate and the resulting solution was washed with aqueous saturated NaHCO<sub>3</sub>. The organic layer was dried over MgSO<sub>4</sub> and concentrated in vacuo. The crude was purified by flash chromatography on silica gel (CH<sub>2</sub>Cl<sub>2</sub>/MeOH gradient) to obtain the desired compound (59 mg) in quantitative yield and as a 9:1 mixture of Z:E isomers. <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>)  $\delta$  6.78 (ddt, *J* = 22.0, 17.2, 6.8 Hz, 1H, CHCH<sub>2</sub>, *E*-isomer), 6.61 (ddt, *J* = 52.8, 13.0, 8.2 Hz, 1H, CHCH<sub>2</sub>, *Z*-isomer), 5.75 (ddt, *J* = 19.0, 13.0, 1.2 Hz, 1H, CHP, *Z*-isomer), 4.24 – 3.96 (m, 4H, O<u>CH<sub>3</sub></u>CH<sub>3</sub>), 3.74 (t, *J* = 5.9 Hz, 2H, CH<sub>2</sub>OH), 2.79 (ddd, *J* = 12.0, 5.6, 1.9 Hz, 2H, CH<sub>2</sub>CH), 1.33 (t, *J* = 7.1 Hz, 6H, CH<sub>2</sub>CH<sub>3</sub>), 60.9 (d, *J* = 2.2 Hz, CH<sub>2</sub>OH), 33.9 (d, *J* = 8.5 Hz, CH<sub>2</sub>CH), 16.5 (CH<sub>3</sub>CH<sub>2</sub>). <sup>31</sup>P NMR (202 MHz, CDCl<sub>3</sub>)  $\delta$  18.1 (s, E-isomer), 17.8 (s, Z-isomer). HMRS TOF ESI+ Found : 209.0943; Calculated for C<sub>8</sub>H<sub>18</sub>O<sub>4</sub>P : 209.0943 (M+H)<sup>+</sup>

#### Diethyl-(Z)-(4-(2-(bis(tert-butoxycarbonyl)amino)-6-methoxy-9H-purin-9-yl)-but-1-en-1-yl) phosphonate

Diethyl-(4-hydroxy)-but-1-en-1-yl-phosphonate (300 mg, 1 eq.) was dissolved in anhydrous CH<sub>2</sub>Cl<sub>2</sub>/Et<sub>2</sub>O (2/1, v/v) at 25°C. The nucleobase (1.5 eq.) was added, then triphenylphosphine (PPh<sub>3</sub>, 1.6 eq.) and diethylazodicarboxylate (DEAD, 1.6 eq.) dropwise. The reaction mixture was stirred for 24 hours and reaction progress was monitered by TLC (CH<sub>2</sub>Cl<sub>2</sub>/MeOH 95/5 v/v). The reaction mixture was concentrated in vacuo and purified by flash chromatography on silica gel (CH<sub>2</sub>Cl<sub>2</sub>/MeOH gradient), which allowed to separate *Z* and E-isomers. The title compound (440 mg) was obtained in 55% yield. <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>)  $\delta$  8.04 (s, 1H, H-<sub>8</sub>), 6.41 (ddt, *J* = 51.6, 13.0, 7.6 Hz, 1H, C<u>H</u>CH<sub>2</sub>), 5.69 (ddt, *J* = 17.8, 13.0, 1.4 Hz, 1H, CHP), 4.37 (t, *J* = 7.0 Hz, 2H, CH<sub>2</sub>N), 4.14 (s, 3H, OCH<sub>3</sub>), 4.09 – 3.97 (m, 4H, OC<u>H</u><sub>2</sub>CH<sub>3</sub>), 3.30 – 3.09 (m, 2H, C<u>H</u><sub>2</sub>CH), 1.45 (s, 18H, CH<sub>3</sub>), 1.30 (t, *J* = 7.0 Hz, 6H, C<u>H</u><sub>3</sub>CH<sub>2</sub>). <sup>13</sup>C NMR (126 MHz, CDCl<sub>3</sub>)  $\delta$  161.6 (C-<sub>6</sub>), 152.5 (d, *J* = 116.3 Hz, C-<sub>2</sub>), 151.2 (s, C-<sub>4</sub>), 147.6 (d, *J* = 3.5 Hz, <u>C</u>HCH<sub>2</sub>), 143.1 (CH-<sub>8</sub>), 121.0 (d, *J* = 182.4 Hz, CHP), 120.0 (C-<sub>5</sub>), 83.2 (<u>C</u>(CH<sub>3</sub>)<sub>3</sub>), 61.8 (d, *J* = 5.5 Hz, <u>C</u>H<sub>2</sub>CH<sub>3</sub>), 54.7 (OCH<sub>3</sub>), 43.0 (CH<sub>2</sub>N), 30.8 (d, *J* 

= 8.0 Hz, <u>C</u>H<sub>2</sub>CH), 28.1 (CH<sub>3</sub>), 16.5 (d, J = 6.3 Hz, <u>C</u>H<sub>3</sub>CH<sub>2</sub>). <sup>31</sup>P NMR (202 MHz, CDCl<sub>3</sub>)  $\delta$  15.5. HMRS TOF ESI+ Found : 556.2535; Calculated for C<sub>24</sub>H<sub>39</sub>N<sub>5</sub>O<sub>8</sub>P : 556.2536 (M+H)<sup>+</sup>.

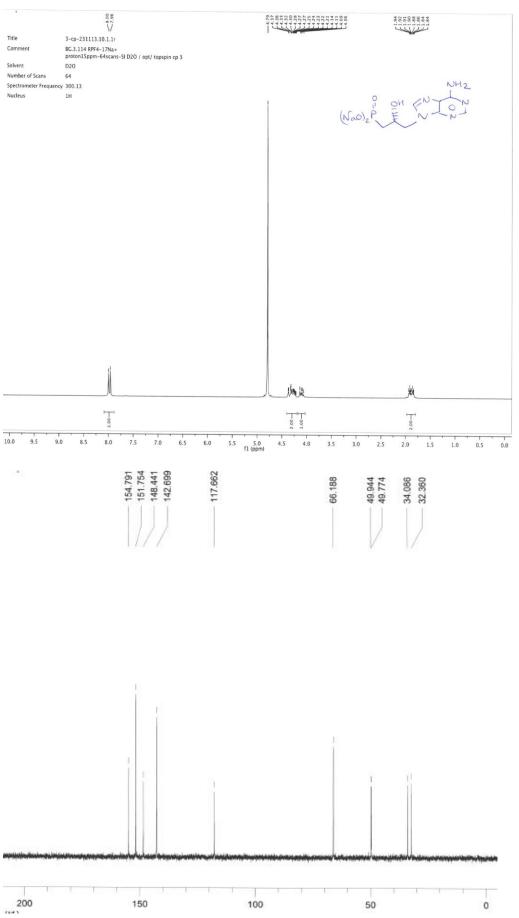
#### Diethyl-(Z)-(4-(2-amino-6-methoxy-9H-purin-9-yl)-but-1-en-1-yl)phosphonate

diethyl-(Z)-(4-(2-(bis(tert-butoxycarbonyl)amino)-6-methoxy-9H-purin-9-yl)-but-1-en-1-То а solution of yl)phosphonate (261 mg, 1 eq.) in anhydrous dichloromethane (3 mL/mmol) was added at room temperature a solution of TFA (8 mL/mmol) in anhydrous dichloromethane (3 mL/mmol). The reaction mixture was stirred for 3h with TLC monitoring (DCM/MeOH, 9/1, v/v). Then, the reaction mixture was diluted with CH<sub>2</sub>Cl<sub>2</sub>, concentrated under vacuum and the crude oil was purified on silica gel by flash chromatography (DCM/MeOH gradient, 0 to 10% MeOH) to obtain quantitatively the desired compound (167 mg). <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>)  $\delta$  7.90 (s, 1H, H-<sub>8</sub>), 6.37 (ddt, J = 51.7, 13.0, 7.7 Hz, 1H, CHCH<sub>2</sub>), 5.67 – 5.61 (m, 1H, CHP), 4.35 (t, J = 6.7 Hz, 2H, CH<sub>2</sub>N), 4.06 (s, 3H, OCH<sub>3</sub>), 3.90 (m, 4H,  $CH_2CH_3$ ), 3.10 (tdd, J = 6.9, 5.0, 2.4 Hz, 2H,  $CH_2CH$ ), 1.22 (t, J = 7.1 Hz, 6H,  $CH_3CH_2$ ). <sup>13</sup>C NMR (126 MHz,  $CDCl_3$ )  $\delta$  158.9 (d, J = 6.8 Hz, C<sub>-6</sub>), 157.8 (C<sub>-5</sub>), 147.6 (d, J = 3.8 Hz, CHCH<sub>2</sub>), 145.0 (CH<sub>-8</sub>), 128.6 (d, J = 83.6 Hz, C<sub>-2</sub>), 120.7 (d, J = 182.2 Hz, CHP), 106.8 (C-4), 61.7 (d, J = 5.1 Hz, OCH<sub>2</sub>CH<sub>3</sub>), 54.7 (OCH<sub>3</sub>), 46.5 (CH<sub>2</sub>N), 31.4 (d, J = 7.7 Hz, CH<sub>2</sub>CH), 16.3 (d, J = 6.0 Hz, CH<sub>3</sub>CH<sub>2</sub>). <sup>31</sup>P NMR (202 MHz, CDCl<sub>3</sub>)  $\delta$  15.33. HMRS TOF ESI+ Found : 356.1489; Calculated for C<sub>14</sub>H<sub>23</sub>N<sub>5</sub>O<sub>4</sub>P : 356.1488 (M+H)<sup>+</sup>

#### (Z)-(4-(2-amino-6-hydroxy-9H-purin-9-yl)-but-1-en-1-yl)phosphonic acid disodic salt 11b

The diethyl-(*Z*)-(4-(2-amino-6-methoxy-9*H*-purin-9-yl)-but-1-en-1-yl)phosphonate (261 mg, 1 eq.) was dissolved under argon atmosphere in anhydrous DMF (20 mL/mmol) at 0°C. TMSBr (6.6 eq.) was added dropwise to the solution, and the mixture was kept at 0°C for 5 min, then allowed to slowly warm to room temperature and stirred for 3 days. The reaction progress was followed by TLC monitoring (isopropanol/water/ammoniac 7/2/1 v/v/v). The reaction was quenched by addition of a triethylbutylammonium solution (1M, pH 7). The volatiles were removed under vacuum and the resulting aqueous solution was freeze-dried. The crude was purified on reverse phase flash chromatography (water/methanol gradient, 0 to 100% methanol), leading to the phosphonate triethylammonium salts as a white powder. The compound was percolated through a Na<sup>+</sup> Dowex resin and after freeze-dried of the require fractions the sodium salts were obtained as a white lyophilizate. The desired compound (130 mg) was obtained in 54% yield. <sup>1</sup>H NMR (500 MHz, D<sub>2</sub>O)  $\delta$  7.82 (s, 1H, H<sub>-8</sub>), 6.11 (ddt, *J* = 45.8, 13.0, 7.4 Hz, 1H, C<u>H</u>CH<sub>2</sub>), 5.83 (ddt, *J* = 17.7, 13.1, 1.6 Hz, 1H, CHP), 4.15 (t, *J* = 7.1 Hz, 2H, CH<sub>2</sub>N), 2.93 (qdd, *J* = 7.0, 2.8, 1.5 Hz, 2H, CH<sub>2</sub>CH). <sup>13</sup>C NMR (126 MHz, D<sub>2</sub>O)  $\delta$  158.9 (C-6), 153.5 (C-2), 151.4 (C-5), 141.1 (<u>C</u>HCH<sub>2</sub>), 140.1 (CH-8), 126.3 (d, *J* = 171.7 Hz, CHP), 115.9 (C-4), 42.8 (CH<sub>2</sub>N), 30.2 (d, *J* = 21.8 Hz, 1C, <u>C</u>H<sub>2</sub>CH). <sup>31</sup>P NMR (202 MHz, D<sub>2</sub>O)  $\delta$  10.5. HMRS TOF ESI+ Found : 286.0708; Calculated for C<sub>9</sub>H<sub>13</sub>N<sub>5</sub>O<sub>4</sub>P : 286.0705 (M+H)<sup>+</sup>.

(R)-(3-(6-amino-9H-purin-9-yl)-2-hydroxypropyl)phosphonic acid (R)-1



Title	3-cp-231113.11.1.1r
Comment	BG.3.114 RPF4=17Na+ P31dec1H-SI D2O / opt/ topspin cp 3
Solvent	D2O
Number of Scans	128
Spectrometer Frequency	121.49
Nucleus	31P

80 20 f1 (ppm) 0 -40 180 140 120 100 60 40 -20 -60 -80 160 -100

- 19.82

#### Elemental Composition Report

Page 1

Single Mass Analysis Tolerance = 2.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 4

 
 Monoisotopic Mass, Even Electron Ions

 363 formula(e) evaluated with 1 results within limits (up to 20 closest results for each mass)

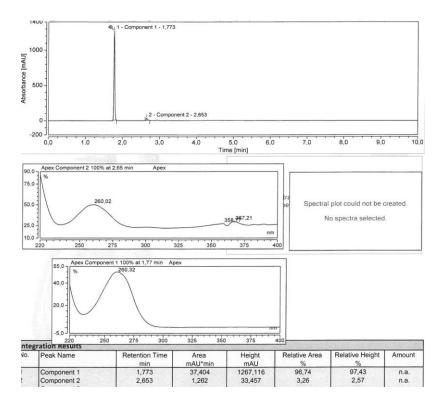
 Elements Used:

 C: 0-100
 H: 0-150

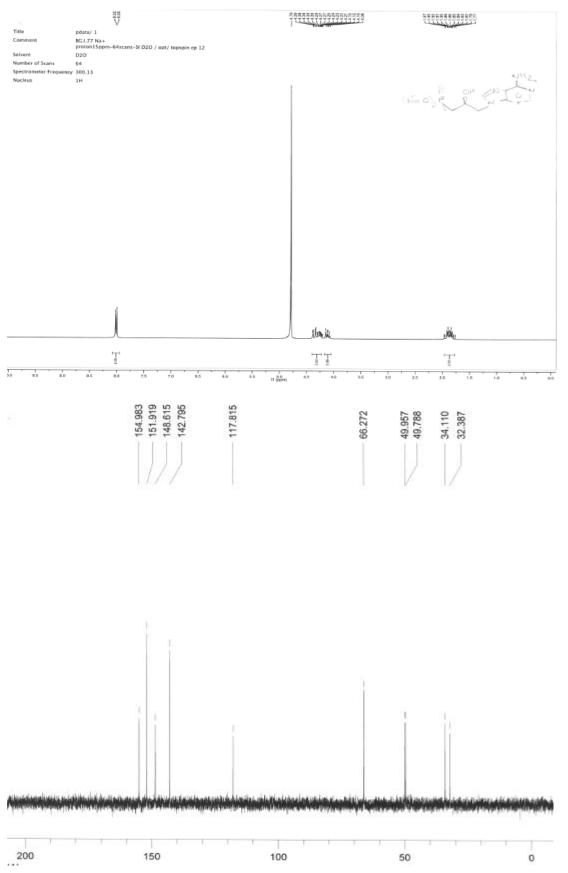
 SynApt 02:-setUE8205

 Y-CP13053106 33 (0.674) AM2 (Ar;30000.0.00,0.00); Cm (30:39)
 31-May-2013 1: TOF MS ES-1.43e+005 272.06 273.06 287.03 288.05 288.99 291.01 m/z 100 255.23 256.24 259.00 261.00 262.98 265.15 266.15 268.98 276.99 279.92 281.25 283.26

255.			265.0		270.0	275.0		280.0	285.0	290.0
Minimum Maximum		5.0	2.0	-1.5 50.0						
Mass	Calc. Mass	πDa	PPM	DBE	i-FIT	Norm	Conf(%)	Formula		
272.055	1 272.0549	0.2	0.7	6.5	1427.9	n/a	n/a	C8 H11 N5 04	P	



# (S)-(3-(6-amino-9H-purin-9-yl)-2-hydroxypropyl)phosphonic acid (S)-1



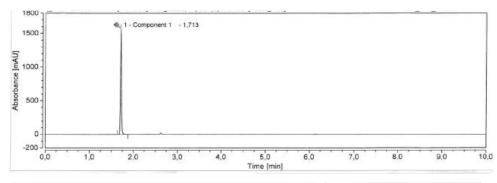
Title	pdata/ 1	
Comment	BGJ.77 Na+ P31dec1H-Si D2O / opt/ topspin cp 12	
	020	
Number of Scans	128	
Spectrometer Frequency	121.49	
Nucleus	31P	

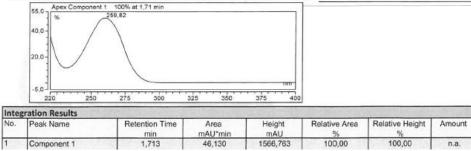
#### Elemental Composition Report

Page 1

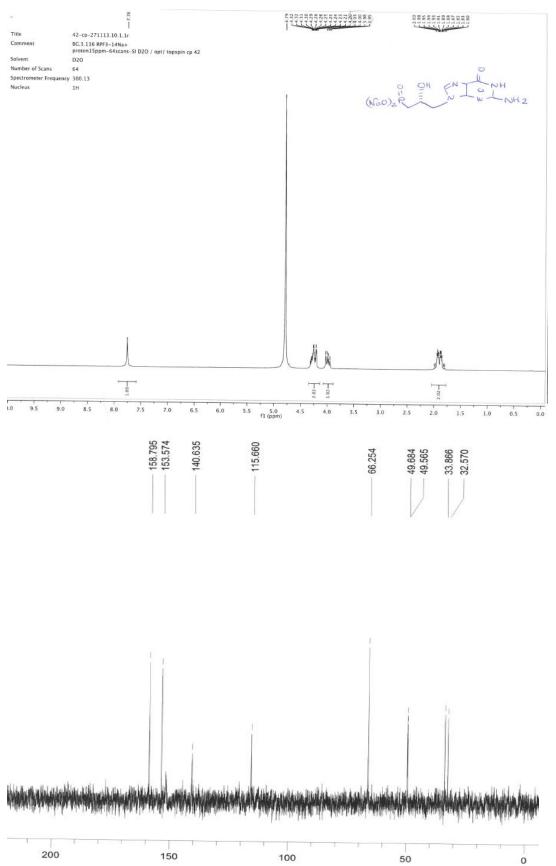
Single Mass Analysis Tolerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for I-FIT = 4

Monoisotopic Mass, Even Electron Ions 342 formula(e) evaluated with 3 results within limits (up to 20 closest results for each mass) Elements Used: C: 0-100 H: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1 SVNAPT 02.54UE8205 Y-CP13091608 14 (0.263) AM2 (Ar,30000.0,0.00,0.00) 16-Sep-2013 1: TOF MS ES+ 1.19e+005 100 311.26 312.02 313.27 315.18 317.19 318.03 319.04 320.04 321.14 321.65 323.15 324.15 325.99 327.25 327.99 328.99 329 34z 310.0 312.0 312.0 314.0 316.0 318.0 320.0 322.0 324.0 326.0 328.0 Minimum: -1.5 10.0 50.0 5.0 Maximum: i-FIT Norm Conf(%) Formula PPM DBE Calc. Mass mDa Mass 318.0349 318.0344 318.0331 318.0357 0.5 1.8 -0.8 1.6 5.7 -2.5 5.5 0.5 10.5 1263.7 0.645 1264.3 1.251 1264.7 1.664 52.45 28.62 18.93 C8 H11 N5 O4 Na2 P C7 H15 N O8 Na2 P C9 H7 N9 Na2 P

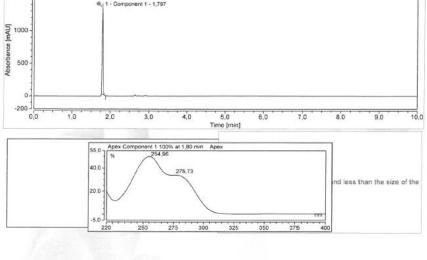




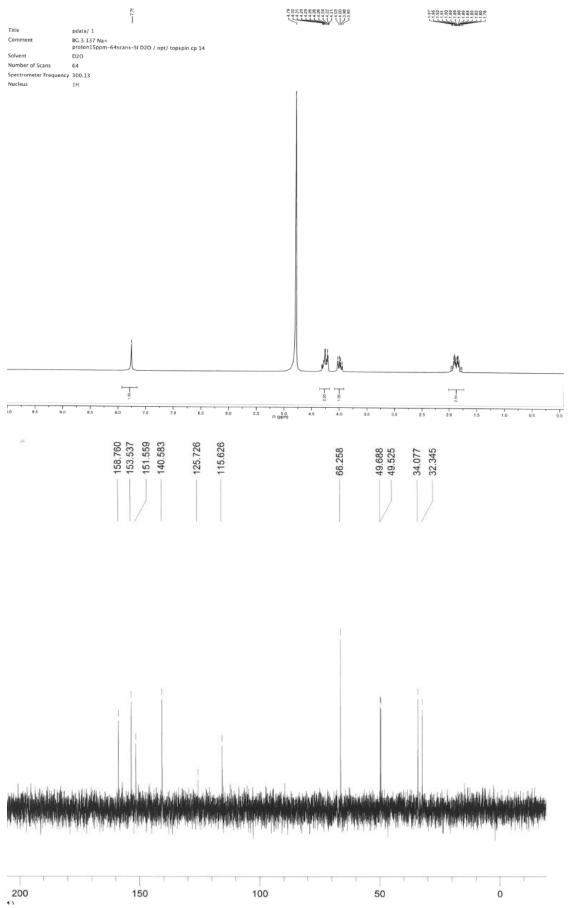
(R)-(3-(2-amino-6-oxo-9H-purin-9-yl)-2-hydroxypropyl)phosphonic acid (R)-2



Title	42-cp-271	113.11.1.1	r				1						
Comment	BG.3.116 R	PF3-14Na-	•										
Solvent	P31dec1H- D2O	51 D20 / 6	pt/ topspin	cp 42									
Number of Scans	128												
Spectrometer Frequency													
Nucleus	31P						1						
*****				ang water and the	-			No. Mada and an and					
180 160	140	120	100	· · · · ·	· · · · · ·	1 + 1 +	<del></del>					1	
180 100	140	120	100	80	60	40	20 f1 (j	ppm)	-20	-40	-60	-80	-100
Monoisotopic Mass	Even Ele	ctron lor											
424 formula(e) eva	luated with	1 result	s within li	mits (up t	to 20 closes	t results for	or each ma	ass)					
Elements Used:		50 0	0.50										
C: 0-100 H: 0-1 SYNAPT G2-S#UEB	50 N: 0	-50 0:	0-50 F	P: 1-1	BGI	1 (RPF1)						31-May-	2012
Y-CP13053105 23 (0	465) AM2 (	Ar, 30000.	0,0.00,0.00	0); Cm (23	:32)	1 (1311)						1: TOF MS	ES-
			288.0	5								9.36e	
100 276.99 278.	97 281.2	5 283.2	6	289.05	293.18 29	6.98 297.9	301.05	304.91 3	09.17.310.03	311.17 3	15.25	318.96,319.	89 m/z
275.0	280.0	285	.0	290.0	295.0	30	0.0	305.0	310.0	3	15.0	320.0	11112
Minimum:				-1.5									
Maximum:		5.0	2.0	50.0									
Mass Cal	c. Mass	mDa	PPM	DBE	i-FIT	Norm	Conf(%	) Form	ula				
288.0498 288	.0498	0.0	0.0	6.5	1455.3	n/a	n/a		11 N5 O5	n			
£00.0%78 ∠88	. 1478	0.0	0.0	0.5	1405.3	117 a	11/ d	C8 H	11 NO US	£'			
1000 ]			7						_				
	<b>R</b> 1	1 - Compon	ent 1 - 1,797										



Inter	ntegration Results											
No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount					
1	Component 1	1,797	38,749	1335,498	100.00	100.00	n.a.					



## (S)-(3-(2-amino-6-oxo-9H-purin-9-yl)-2-hydroxypropyl) phosphonic acid (S)-2

		N 97 6
		Ī
Title	pdata/ 1	
Comment	BG.3.137 Na+ P31dec1H-SI D2O / opt/ topspin cp 14	
Solvent	D2O	
Number of Scans	128	
Spectrometer Frequency	121.49	
Nucleus	31P	
- 4		

#### Elemental Composition Report

Single Mass Analysis Tolerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 4

 
 Monoisotopic Mass, Even Electron Ions

 401 formula(e) evaluated with 4 results within limits (up to 20 closest results for each mass)

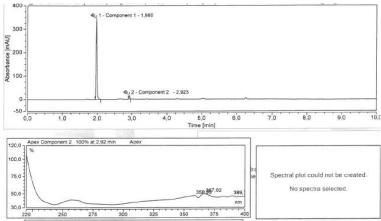
 Elements Used:

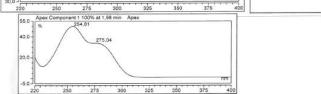
 C: 0-100
 H: 0-150

 SYNAPT G2-S#UE8205

 Y-CP13091609 11 (0.213) AM2 (Ar;30000.0.00,0.00)
 16-Sep-2013 1: TOF MS ES+ 1.72e+005 334.03 335.03 336.03 339.18 341.31 343.99 345.99 348.07 349.19 349.89 m/z 350.0 100 325.27 327.25 328.02 330.13 331.21

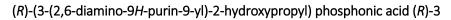
	326.0	328.0	330.0	332.0	334.0	336.0	338.0	340.0	342.0	344.0	346.0	348.0
Minimum: Maximum:			5.0	10.0	-1.5 50.0							
Mass	Calc	. Mass	mDa	PPM	DBE	i-FIT	Norm	Conf(%)	Formula			
334.0302	334. 334. 334. 334.	0307 0333	0.9 -0.5 -3.1 2.2	2.7 -1.5 -9.3 6.6	5.5 10.5 9.5 0.5	1227.6		90.82 5.89 1.85 1.44	C9 H7 N9 C13 H11		P a2 P	

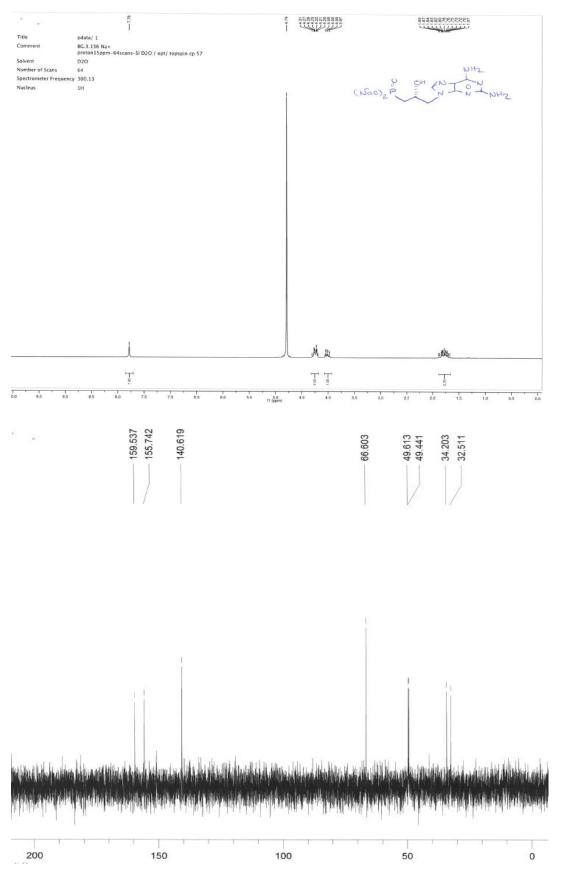




No.	Peak Name	Retention Time min	Area mAU*min	Height mAU	Relative Area %	Relative Height %	Amount
1	Component 1	1,980	10,921	344,675	96,45	95,77	n.a.
n.a.	Component 2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Component 2	2,923	0,402	15,231	3,55	4,23	n.a.

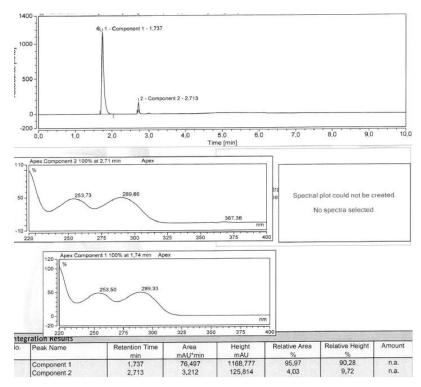
Page 1



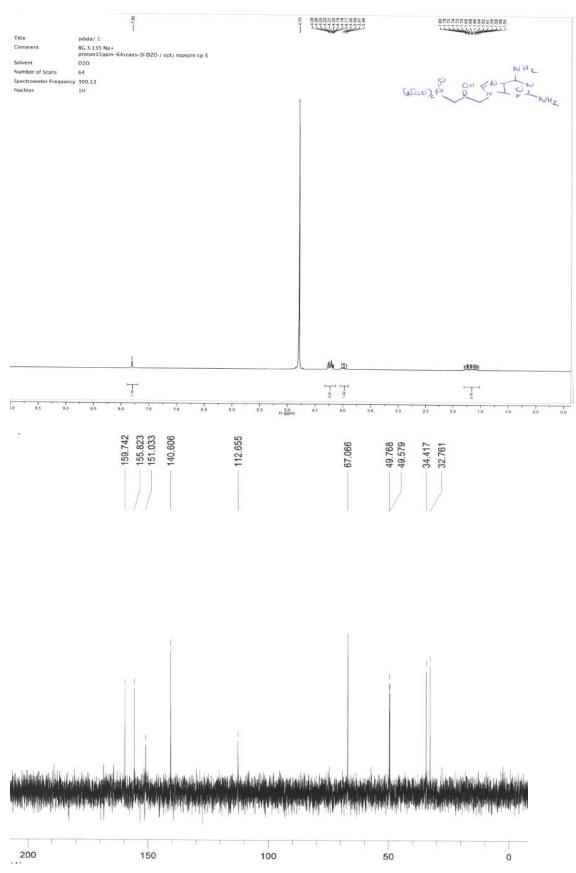


Bit Status         Description (Section Status)           where it is a status         DOD           Bingle Mass Analysis Olerance = 100.0 PPM / DEE: min = -1.5, max = 50.0           Bingle Mass Analysis Olerance = 10.0 DPM         DEE: min = -1.5, max = 20.0      <	Title Comment	*C#
Pileti-1-9 020 / spr/ tespin cp 10 where 0 200 where 0 5 case 128 externa 200 stream 128 externa 200 stream 128 externa 200 stream 128 externa 200 stream 128 externa 200 stream 128 stream 128 stre		pdata / 1 RG 3 136 Na+
under of Stans       124         ucleus       31P         ucleus       32P         ucleus       32P </th <th></th> <th>P31dec1H-SI D2O / opt/ topspin cp 10</th>		P31dec1H-SI D2O / opt/ topspin cp 10
Page 1 be used of the two	olvent	
uchus       31P <sup>1</sup> / <sub>2</sub> = 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,		
$\frac{1}{12422925113} \frac{1}{2613} \frac{1}{270} \frac{1}{280} \frac{1}{280} \frac{1}{280} \frac{1}{280} \frac{1}{380} \frac{1}{$		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:	lucieus	31P
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
Image: Non-transmission         Page 1           Image: Non-transmission         Page 1           Single Mass Analysis Olerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 (ement prediction: Off Jumber of isotope peaks used for i-FIT = 4         Page 1           tonoisotopic Mass, Even Electron Ions B6 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) (ement Jumber 02.5% UEB205 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 (c) 100 H: 0-150 N: 0-50 N:		
No         tie         tie <thtie< th="">         tie         <thtie< th=""> <thtie< th=""> <thtie< th=""></thtie<></thtie<></thtie<></thtie<>		
No         tie         tie <thtie< th="">         tie         <thtie< th=""> <thtie< th=""> <thtie< th=""></thtie<></thtie<></thtie<></thtie<>		
No         tie         tie <thtie< th="">         tie         <thtie< th=""> <thtie< th=""> <thtie< th=""></thtie<></thtie<></thtie<></thtie<>		
No         tie         tie <thtie< th="">         tie         <thtie< th=""> <thtie< th=""> <thtie< th=""></thtie<></thtie<></thtie<></thtie<>		
Elemental Composition Report       Page 1         Single Mass Analysis folerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 lement prediction: Off Jumber of isotope peaks used for i-FIT = 4 Monoisotopic Mass, Even Electron Ions 66 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass) lements Used: : 0-100 H: 0-150 N: 0-50 O: 0-50 Na: 2-2 P. 1-1 BGI95RPF5-12Na+       16-Sep-2013 : 105 MSE S+ 388e+006         100 242 29251 13 261.13 271.07       289.08 301.08 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 409.22 413.27 418.02 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410	90 180 170 160	
Single Mass Analysis           Olderance = 10.0 PPM / DBE: min = -1.5, max = 50.0           Element prediction: Off           Jumber of Isotope peaks used for i-FIT = 4           Monolsotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron long           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron long, 20 for the formation in the		
Single Mass Analysis           Olderance = 10.0 PPM / DBE: min = -1.5, max = 50.0           Element prediction: Off           Jumber of Isotope peaks used for i-FIT = 4           Monolsotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron lons           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron long           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idemonisotopic Mass, Even Electron long, 20 for the formation in the		Page 1
Operance = 10.0 PPM / DBE: min = -1.5, max = 50.0           Humber of listope peaks used for I-FIT = 4           Monolisotopic Mass, Even Electron Ions 86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Herments Used: Imments Used: C-0100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 ECP13091610 12 (0.229) AM2 (Ar,30000.0.0.0.0.00)         16-Sep-2013 1: TOF MS ES+ 388e+006           100 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410         301.08 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 400 410	lemental Com	position Report rage i
Operance = 10.0 PPM / DBE: min = -1.5, max = 50.0           Humber of listope peaks used for I-FIT = 4           Monolisotopic Mass, Even Electron Ions 86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Herments Used: Imments Used: C-0100 H: 0-150 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 ECP13091610 12 (0.229) AM2 (Ar,30000.0.0.0.0.00)         16-Sep-2013 1: TOF MS ES+ 388e+006           100 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410         301.08 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 400 410		
Idement prediction: Off           Jumber of isotope peaks used for i-FIT = 4           tonoisotopic Mass, Even Electron Ions           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Idements Used:           :0-100 Ft: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           IYNAPT G2:\$#UEB205           :C-2010 Ft: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :YNAPT G2:\$#UEB205           :C-2010 Ft: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 1: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 2: 0-2013           :Store 2: 0-2013           :C-100 Ft: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 1: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 1: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 1: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 1: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1           :Store 1: 0-150 N: 0-50 O: 0-50 N: 0-50 O: 0-50 N: 0		
Jumber of isotope peaks used for i-FIT = 4           Monoisotopic Mass, Even Electron Ions           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           Isements Used:           :: 0-100 H: 0-150 N: 0-50 O: 0-50 Na: 2-2 P. 1-1           BGI95RPF5-12Na+           :: 0-100 H: 0-150 N: 0-50 O: 0-50 Na: 2-2 P. 1-1           SG195RPF5-12Na+           :: 0-13091610 12 (0.229) AM2 (Ar,30000.0.0.00.00)           :: 0-100 11 (0.12) (0.229) AM2 (Ar,30000.0.0.00.00)           :: 0-100 11 (0.12) (0.229) AM2 (Ar,30000.0.0.00.00)           :: 0-100 12 (0.229) AM2 (Ar,30000.0.0.00.00)           :: 0-100 12 (0.229) AM2 (Ar,30000.0.0.00.00)           :: 0-100 12 (0.229) AM2 (Ar,30000.0.0.00,00)           :: 0-100 12 (0.12)		
Monolsotopic Mass, Even Electron Ions           86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           iements Used:           :0-100         H: 0-150         N: 0-50         O: 0-50         Na. 2-2         P. 1-1           :YNAPT G2-\$#UEB205         BGI95RPF5-12Na+         16-Sep-2013           :CP13091610 12 (0.229) AM2 (Ar.30000.0.0.0.0.0.0)         BGI95RPF5-12Na+         16-Sep-2013           :Q0         1242.29251.13 261.13 271.07         301.08 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 409.22.413.27 <sup>418.02</sup> :240         250         260         270         280         290 300 310 320 330 340 350 360 370 380 390 400 410		
86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           bienents Used:           :: 0-100         H: 0-150         N: 0-50         O: 0-50         Na: 2-2         P. 1-1           :YNAPT G2: &#UEB205         BGI95RPF5-12Na+         16-Sep-2013           :CP13091610 12 (0.229) AM2 (Ar,30000.0.0.00.00)         1: TOF MS ES+         388+006           :Q0         1242.29251.13 261.13 271.07         301.06 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 400 2.2.413.27 418.02           :240         250         260         270         280         290 300 310 320 330 340 350 360 370 380 390 400 410	under of isotopi	a poure adda for Frith
86 formula(e) evaluated with 5 results within limits (up to 20 closest results for each mass)           bienents Used:           :: 0-100         H: 0-150         N: 0-50         O: 0-50         Na: 2-2         P. 1-1           :YNAPT G2: &#UEB205         BGI95RPF5-12Na+         16-Sep-2013           :CP13091610 12 (0.229) AM2 (Ar,30000.0.0.00.00)         1: TOF MS ES+         388+006           :Q0         1242.29251.13 261.13 271.07         301.06 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 400 2.2.413.27 418.02           :240         250         260         270         280         290 300 310 320 330 340 350 360 370 380 390 400 410</td><td></td><td>, Even Electron lons</td></tr><tr><td>Circlop         H: 0-150         N: 0-50         O: 0-50         Na. 2-2         P: 1-1         16-Sep-2013           VNAPT G2-S#UE8205         BGI95RPF5-12Na+         16-Sep-2013         1: TOF MS ES+ 388+006           CP13091610 12 (0.229) AM2 (Ar, 30000.0.0.00.00)         301.06         311.06         327.03         333.05         345.14         355.03         367.13         381.30         393.30         409.22.413.27         M/z           240         250         260         270         280         290         301         320         330         340         350         360         370         380         400         410</td><td>Annoisotopic Mass</td><td>uated with 5 results within limits (up to 20 closest results for each mass)</td></tr><tr><td>VINAPT G2-\$#UEB205         BGI95RPF5-12Na+         16-\$ep-2013           -CP13091610 12 (0.229) ANZ (Ar,30000.0.0.00,000)         BGI95RPF5-12Na+         16-\$ep-2013           100         240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410         311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 409.22 413.27 418.02</td><td>86 formula(e) eval</td><td></td></tr><tr><td>CP13081610 12 (0.229) AM2 (Ar,30000.0.0.00,0.0.00)       1: TOF MS ES+ 388+006         100 242.29251.13 261.13 271.07       289.08 301.06 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 409.22 413.27 <sup>418.02</sup> w/z         240       250       260       270       280       290       310       320       340       350       367.13       381.30       393.30 409.22 413.27 <sup>418.02</sup> w/z</td><td>886 formula(e) eval Elements Used:</td><td></td></tr><tr><td>3.88e+006 3.82e+006 3.01.08 311.06 327.03 333.05 345.14 355.03 367.13 381.30 393.30 409.22 413.27 418.02 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410</td><td>86 formula(e) eval Elements Used: C: 0-100 H: 0-1</td><td>50 N; 0-50 O; 0-50 Na: 2-2 P. 1-1</td></tr><tr><td>242         29251         13         261         33         049         22         413         271         07         301         06         347         03         333.05         345         14         355.03         367.13         381.30         393.30         409.22         413         277         0.52           240         250         260         270         280         290         300         310         320         330         340         350         360         390         400         410</td><td>86 formula(e) eval Elements Used: C: 0-100 H: 0-1 SYNAPT G2-S#UEB2</td><td>50 N: 0-50 O: 0-50 Na. 2-2 P. 1-1 BGI95RPF5-12Na+ 16-Sep-2013</td></tr><tr><td>240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410</td><td>86 formula(e) eval Elements Used: C: 0-100 H: 0-1 SYNAPT G2-S#UEB2</td><td>50         N: 0-50         O: 0-50         Na. 2-2         P. 1-1         16-Sep-2013           205         BGI95RPF5-12Na+         15: TOF MS E5+         12: TOF MS E5+           229) AM2 (Ar, 30000.0.0.00,00.00)         3:86+006         3:86+006</td></tr><tr><td>210 200 200 210 200 200 000 010 020 010 01</td><td>86 formula(e) eval Elements Used: C: 0-100 H: 0-18 SYNAPT G2-S#UEB2 (-CP13091610 12 (0.</td><td>50         N: 0-50         O: 0-50         Na: 2-2         P: 1-1         16.Sep-2013           205         BGI95RPF5-12Na+         16.Sep-2013         17.TOF MS ES+           229) AM2 (Ar, 30000.0.0.0.0.0.0)         3.88e+006         3.88e+006</td></tr><tr><td>15</td><td>186 formula(e) eval Elements Used: 2: 0-100 H: 0-13 SYNAPT G2-S#UEB2 f-CP13091610 12 (0.</td><td>50         N: 0-50         O: 0-50         Na. 2-2         P. 1-1         16-Sep-2013           205         BGI95RPF5-12Na+         16-Sep-2013         1: TOF MS ES+           329) AM2 (Ar, 30000.0.0.0.0.0.0)         1: TOF MS ES+         3.88e+006           261.13         271.07         289.08         301.08         311.06         327.03         333.05         345.14         355.03         367.13         381.30         393.30         409.22         413.274         fmz</td></tr><tr><td></td><td>86 formula(e) eval lements Used: ; 0-100 H: 0-13 synAPT G2-S#UEB2 4-CP13091610 12 (0.</td><td>50         N: 0-50         O: 0-50         Na. 2-2         P. 1-1         16-Sep-2013           205         BGI95RPF5-12Na+         16-Sep-2013         1: TOF MS ES+           329) AM2 (Ar, 30000.0.0.0.0.0.0)         1: TOF MS ES+         3.88e+006           261.13         271.07         289.08         301.08         311.06         327.03         333.05         345.14         355.03         367.13         381.30         393.30         409.22         413.274         fmz</td></tr></tbody></table>		

Maximum:		5.0	10.0	50.0				
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Norm	Conf(%)	Formula
333.0460	333.0453 333.0440 333.0480 333.0466 333.0493	2.0 -2.0 -0.6	2.1 6.0 -6.0 -1.8 -9.9		1198.7 1203.5 1204.2 1206.3 1206.7	4.798 5.529 7.585	0.82 0.40 0.05	C8 H12 N6 O4 Na2 P C7 H16 N2 O8 Na2 P C12 H16 O6 Na2 P C9 H8 N10 Na2 P C13 H12 N4 O2 Na2 P



(S)-(3-(2,6-diamino-9H-purin-9-yl)-2-hydroxypropyl) phosphonic acid (S)-3

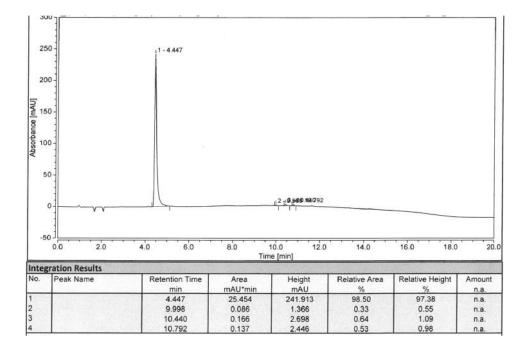


			- 17.52		
Title	pdata/ 1				
Comment	BG.3.135 Na+ P31dec1H-SI D2O / opt/ topspin cp 5				
Solvent	D2O				
Number of Scans	128				
Spectrometer Frequency	121.49				
Nucleus	31P				
			1		
			1		
			1		
	######################################		and water and a second s		
190 180 170 160	150 140 130 120 110 100 90 80	70 60 50 40 30	20 10 0 -10 -20 f1 (ppm)	-30 -40 -50 -60 -70	-80 -90 -100
			f1 (ppm)		-80 -90 -100
El	iti - Denet				-
Elemental Co	mposition Report				Page
Single Mass A	nalvsis				

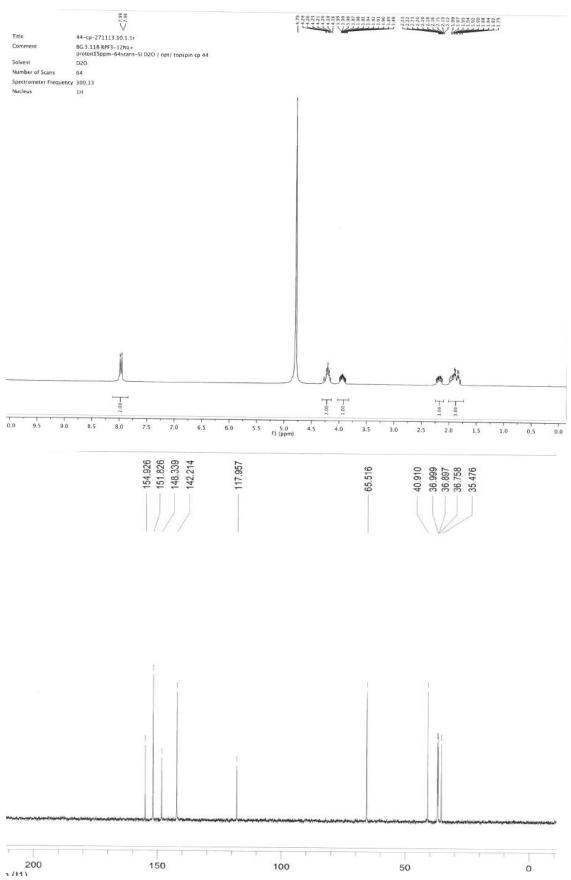
Tolerance = 10.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 4

Monoisotopic Mass, Even Electron Ions 386 formula(e) evaluated with 6 results within limits (up to 20 closest results for each mass) Elements Used: C: 0-100 H: 0-150 N: 0-50 O: 0-50 Na: 2-2 P: 1-1

C: 0-100 H: 0- SYNAPT G2-S#UE Y-CP13091611 8 (0	B205 157) AM2 (Ar,30	0000.0,0.00,0.00); (		BGI94RF	PF4-12Na+				1: TOF (	ep-2013 MS ES+ 12e+006
100 0 260	273.17 <sup>277.1</sup> 270 280	5 289.08 301. 290 300	minuite	313.24 32 320	5.08 <sup>333.0</sup> 330	5 337.02 35 340	1.23 355.03 36 350 360		381.30 393.3 380 390	30 m/z
Minimum: Maximum:	5	.0 10.0	-1.5 50.0							
Mass Ca	lc. Mass m	Da PPM	DBE	i-FIT	Norm	Conf(%)	Formula			
33 33 33 33	3.0440 1 3.0480 - 3.0466 - 3.0426 2	0.3 -0.9 .0 3.0 3.0 -9.0 1.6 -4.8 .4 7.2 .9 8.7	0.5 4.5 10.5 6.5	1760.0 1763.2 1765.7 1766.2	7.502 10.693 13.140 13.703			2 P Na2 P		



(R)-(4-(6-amino-9H-purin-9-yl)-2-hydroxybutyl)phosphonic acid (R)-4



						20.74				
litle	44-cp-271113.1	11.1.1.				1				
Comment	BG.3.118 RPF3-1 P31dec1H-SI D2	12Na+	pspin co 44							
olvent	D20	o / opt/ toj	рарлі ср 44							
Number of Scans										
lucleus	31P									
						1				
						-	~~~~			
180 160	140	120	100	80	60 40	20	0 f1 (ppm)	-20 -40	-60	-80 -10
							f1 (ppm)			
Elemental Co	omposition	Repo	rt							Pag
	1. 1. 1.									
Single Mass Tolerance = 2.0		BE' min	= -1.5	max = 5	0.0					
Element predic		DE. min		max = 0	0.0					
Number of isot	ope peaks u	sed for i	-FIT = 4							
Monoisotopic Ma	ss, Even Elec	ctron lons	s							
422 formula(e) e	ss, Even Eler valuated with	ctron Ion: 1 results	s s within lir	mits (up t	o 20 closes	t results fo	or each mass)			
Monoisotopic Ma 422 formula(e) e Elements Used: C: 0-100 H: 0	valuated with	1 results	within lin		o 20 closes	t results fo	or each mass)			
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#No	valuated with -150 N: 0- itSet	1 results 50 O:	within lin		o 20 closes BG3.1		or each mass)			19-Sep-2
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#No Y-CP14091902 17	valuated with -150 N: 0- tSet (0.329) Cm (17	1 results 50 O: 7)	within lin		BG3.	118				1: TOF MS E 5.03e+
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#No Y-CP14091902 17	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98	1 results 50 O: 7) 288.09	within lin 0-50 F 301.14	P: 1-1 4 310.07	BG3. 315.18 326	118 03 331.2	<sup>2</sup> 344.05 352	.06 366	06 379.40	1: TOF MS E 5.03e+
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#No Y-CP14091902 17	valuated with -150 N: 0- tSet (0.329) Cm (17	1 results 50 O: 7) 288.09	within lin 0-50 F	P: 1-1	BG3.	118		. <u>06 366</u> 360	.00	1: TOF MS E 5.03e+ 385 29 390.0
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#NC Y-CP14091902 17 100 257.97 27 260 2 Minimum:	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98	1 results 50 O: 7) 288.09 290	301.1/ 300	P: 1-1 <u>4 310.07</u> <u>310</u> -1.5	BG3. 315.18 326	118 03 331.2	<sup>2</sup> 344.05 352		.00	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#NG Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum:	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280	1 results 50 O: 7) 288.09 290 1.0	301.1/ 300 2.0	P: 1-1 <u>4 310.07</u> <u>310</u> -1.5 50.0	BG3. 315.18 326 320	118 03 331.2	<sup>2</sup> 344.05 352 340 350	360	.00	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#NG Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum:	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98	1 results 50 O: 7) 288.09 290	301.1/ 300	P: 1-1 <u>4 310.07</u> <u>310</u> -1.5	BG3. 315.18 326	118 03 331.2	<sup>2</sup> 344.05 352	360	.00	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ce	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280	1 results 50 O: 7) 288.09 290 1.0	301.1/ 300 2.0	P: 1-1 <u>4 310.07</u> <u>310</u> -1.5 50.0	BG3. 315.18 326 320	118 .03 331.2 330	2 344.05 352 340 350 Conf(%) F	360	370 3	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ce	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280 98 70 280 alc. Mass	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm	2 344.05 352 340 350 Conf(%) F	360 ormula	370 3	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ce	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280 98 70 280 alc. Mass	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm	2 344.05 352 340 350 Conf(%) F	360 ormula	370 3	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#NC Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ce	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 03 331.2 330 Norm n/a	2 344.05 352 340 350 Conf(%) F n/a C	360 ormula 9 H15 N5 C	370 3	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Cc 288.0867 29	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280 98 70 280 alc. Mass	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ce	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Cc 288.0867 29	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT 62-5#W Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass C4 288.0867 28	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT 62-5#W Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass C4 288.0867 28	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ca 288.0867 25	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT 62-5#W Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass C4 288.0867 28	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#NK Y-CP14091902 17 100 257.97 27 260 2 Minimum: Mass C2 288.0867 26 1,50- 0,50-	valuated with -150 N: 0- tSet (0.329) Cm (17 0.08 280.98 70 280 10. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#NA Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Ca 288.0867 26 1,50- 0,50- 0,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa	301.1/ 301.1/ 300 2.0 PPM	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 326 320 i-FIT	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#NA Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass C2 288.0867 26 1,50- 0,50-	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862	1 results 50 O: 7) 288.09 290 1.0 mDa 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE	BG3. 315.18 328 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#NK Y-CP14091902 17 100 257.97 27 260 2 Minimum: Mass Cz 288.0867 26 1,50- 0,50- 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5.03e+ 385.29 390.1
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#Ne Y-OP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,50 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 315.18 326 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a	2 344 05 352 340 350 Conf(%) F n/a C T Area	360 ormula 9 H15 N5 C % Area	370 3 Height	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#Ne Y-OP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,50 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5.03e 385.29 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#Ne Y-OP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,50 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#Nc Y-CP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,50 0,00 2,00 220.00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#Ne Y-OP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,50 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT 62-5#M Y-CP14091902 17 100 257.97 27 260 2 Minimum: Maximum: Mass Cz 288.0867 28 1,50- 0,50- 0,50- 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#W Y-CP14091902 17 100 257.97 27. 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,00 2,00 210.8	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: O-100 H: 0 SYNAPT G2-S#Ne Y-OP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1,50 0,50 0,00 2,00 220,00	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390
422 formula(e) e Elements Used: C: 0-100 H: 0 SYNAPT G2-S#W Y-CP14091902 17 100 257.97 27 260 2 Minimum: Mass Ca 288.0867 26 1.50 0.00 2.00 210.8	valuated with -150 N: O- tSet (0.329) Cm (17 0.08 280.98 70 280 Alc. Mass 18.0862 	1 results 50 O: 288.09 290 1.0 mDa 0.5 0.5 0.5	301.1 300 2.0 PPM 1.7	P: 1-1 4 310.07 310 -1.5 50.0 DBE 5.5 0 12,00	BG3. 320 i-FIT 2642.5	118 .03 331.2 330 Norm n/a 1 3,54	2 344.05 352 340 350 Conf(%) F n/a C T Area 58 27201874	360 ormula 9 H15 N5 C % Area 4 100,00	370 3	1: TOF MS E 5:03e+ 385:29 390 80 390

(S)-(4-(6-amino-9H-purin-9-yl)-2-hydroxybutyl)phosphonic acid (S)-4



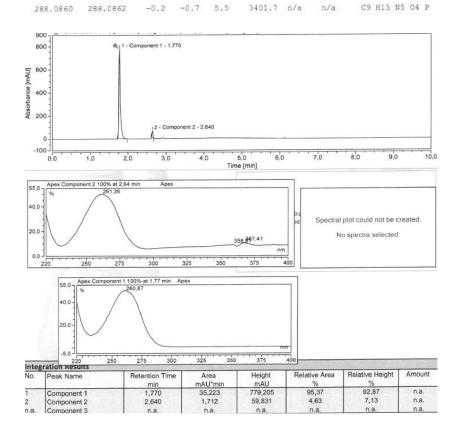
190 180 17	0 160 15	0 140	130	120	110	100	90	ao	70	60	50	40	30	20	10 11 (ppm)	0	-10	-20	-30	-40	-50	-60	.70	ac	-90	-100
icleus	3	19												1												
ectrometer F	requency 1	21.49																								
mber of Sca		20																								
ivent	P	31dec1H	I-SI D	20/0	opt/ to	opspin	cp 9																			
mment		G.3.147	Nat																							
tle		idata/ 1												-20.65												

#### Elemental Composition Report

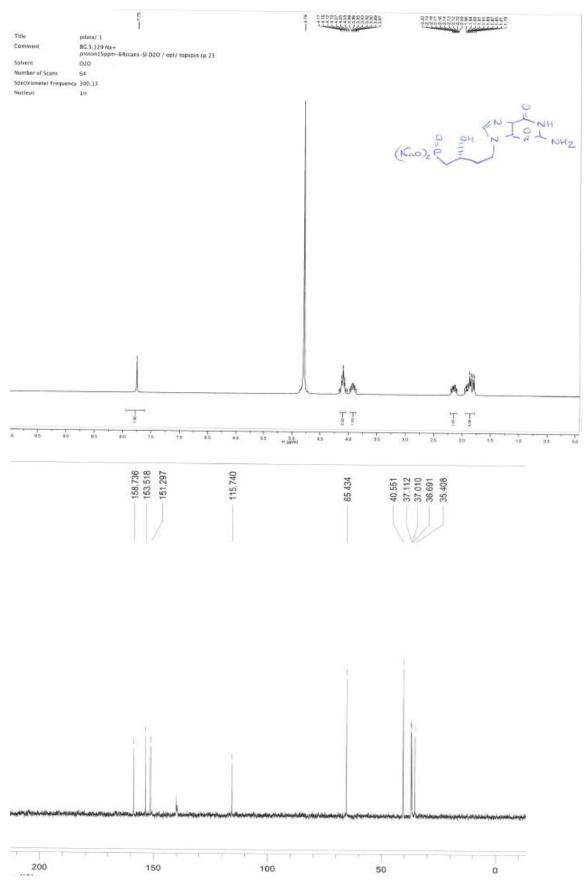
Page 1

Single Mass Analysis Tolerance = 2.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 4

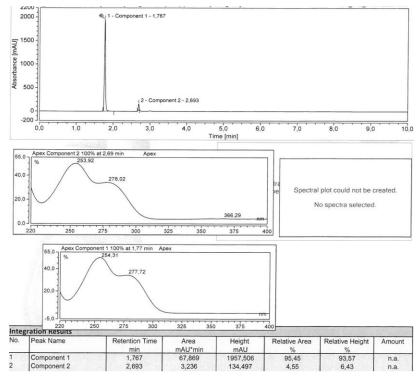
Monoisotor 422 formula Elements L	a(e) evalua Jsed:	ated with	n 1 results	within li		to 20 clos	sest results	for each	mass)				
C: 0-100 SYNAPT G2 Y-CP140919		8 1372		0-50	P: 1-1	B	G3.147					19-Sep 1: TOF MS 7 834	
100	270.07 273	3.17 2	279.09 280.	98281.9	288.0 19	289.09	295.19300	.06.301.14	302.14 307.	07 310.07	315.1831	18.04319.05	
0	270.0	275.0	280.0	28	5.0	290.0	295.0	300.0	305.0	310.0	315.0	320.0	
Minimum: Maximum:			1.0	2.0	-1.5 50.0								
Mass	Calc.	Mass	mDa	PPM	DBE	1-FI	T Norm	Conf	(%) Form	ula			



(R)-(4-(2-amino-6-oxo-9H-purin-9-yl)-2-hydroxybutyl) phosphonic acid (R)-5

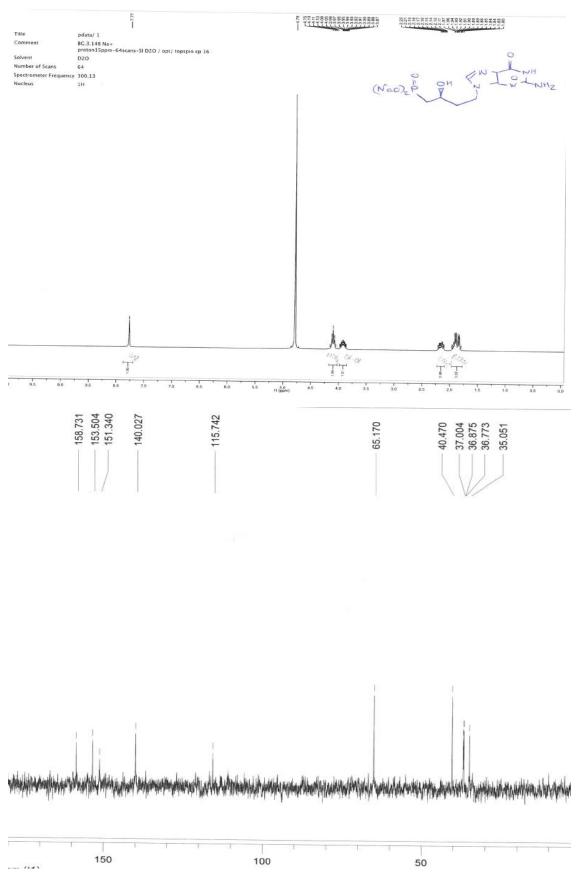


					- 20.52				
ie	pdata/ 1								
mment	BG.3.129 Na P31dec1H-S	+ I D2O / opt/ to;	minin on 23						
vent	D20	oro i opti toj	paper op 23						
mber of Scans	128								
ctrometer Frequ leus	ancy 121.49 31P								
	31P				1				
000-00-00-000-00-00-00-00-00-00-00-00-0	Recentle Mitter (ed 1) obje								
* 1 * 1 * 1 185 170 16	0 150 140 15	0 120 110	100 90 80 TO	60 50 40	30 20 11 (perc)	0 -10 -20	1 • 1 • 1 -30 -40 -9	0 -60 -70	- 1 - 1 - 400 - 300
185 170 16	e 150 540 53	e 120 116	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	60 50 40	30 20 11 (pper)	1 1 1 1 1 0 10 20	1 · 1 · 1 -30 -40 -54	0 60 .70	-80 -80
			1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 60 60 40 	30 23 II (Spec)	1 · 1 · 1 · 1 · 0 · -10 · -20	1 - 1 - 1 -30 - 40 - 61	0 -60 -70	
	۰ نو نو نو		100 90 80 TO		30 23 n (ppro)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 -30 40 -9	o eo .ro	Page 1
Elemental	Compositio		1 1 1 1 1 100 60 60 TO		30 20 n 94-40	1 1 1 1 1 0 -10 -20	1 1 1 - 1 -30 40 -9	0 -60 -70	
Elemental ( Single Mas	Compositio s Analysis	n Report			30 20 m Heren	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 5 -30 46 -9	0 60 -70	
ingle Mas	Compositio s Analysis 2.0 PPM / 1	n Report	1.5, max = 50			1 · 1 · 1 · 2 · 0 · -50 · -28	1 * 1 * 1 30 40 - G	0 60 -70	
ingle Mas	Compositions S Analysis 2.0 PPM / 1 Liction: Off	DBE: min =	-1.5, max = 50		- 1 - 1 - 1	1 1 1 - 1	1 1 1 1 30 40 G	60 -70	
Elemental ( Single Mas Solerance = 1 Siement prec Jumber of is	Compositions S Analysis 2.0 PPM / 1 inction: Off otope peaks (	DBE: min =	-1.5, max = 50		30 23 11 10 10			0 60 .70	
Elemental ( Single Mas Colerance = 2 Element prec Jumber of is Monoisotopic I	Sompositions Software Analysis 2.0 PPM / 1 Section: Off otope peaks Mass, Even Ele	DBE: min = used for i-F	-1.5, max = 50 IT = 4	.0	парно		1 1 1 1 - 1 - 1 - 30 - 40 - 50	0 40 .70	
Elemental ( Single Mas olerance = 3 Element pred lumber of is tonoisotopic ( 89 formula(e)	Compositions s Analysis 2.0 PPM / 1 liction: Off otope peaks of Mass, Even Eli- evaluated with	DBE: min = used for i-F	-1.5, max = 50	.0	парно		1 • 1 • 1 30 40 4	0 40 .70	
Elemental ( Single Mas olerance = ) Sement prec lumber of is fonoisotopic ( 89 formula(e) Herments Use	Compositio s Analysis 2.0 PPM / 1 liction: Off otope peaks i Mass, Even Ek evaluated with d:	DBE: min = used for i-F ectron lons h 1 results w	-1.5, max = 50 IT = 4 vithin limits (up to	.0	парно			e <del>te</del> 70	
Elemental 4 Single Mas folerance = 3 lement prec lumber of is fonoisotopic 89 formula(e) lements Use 3: 0-100 H: 1	Compositio s Analysis 2.0 PPM / 1 iction: Off otope peaks i Mass, Even Ek evaluated with d: 0-150 N: 0-50	DBE: min = used for i-F ectron lons h 1 results w	-1.5, max = 50 IT = 4 vithin limits (up to	0 2D closest resu	парно		1 + 1 + - 1 30 40 - 0		Page 1
Elemental ( Single Mas olerance = ) Element pred lumber of is Monoisotopic   89 formula(e) 189 formula(e) 190 militation 190 m	Compositio s Analysis 2.0 PPM / 1 liction: Off otope peaks i Mass, Even El- de evaluated with de de 0-150 N: 0-50 NotSet	DBE: min = used for i-F ectron lons h 1 results w	-1.5, max = 50 IT = 4 vithin limits (up to	.0	парно		1 - 1 - 1 30 40 -0	17	Page 1
Elemental ( single Mas olerance = ) lement pred lumber of is fonoisotopic   89 formula(e) 10 mula(e) 89 formula(e) 10 mula(e) 10	Compositio s Analysis 2.0 PPM / 1 liction: Off otope peaks i Mass, Even El- de evaluated with de de 0-150 N: 0-50 NotSet	DBE: min = used for i-F ectron lons h 1 results w	-1.5, max = 50 IT = 4 vithin limits (up to	0 2D closest resu	парно		1 • 1 • 1 -20 40 -61	17 1: TO	Page 1
Elemental ( Single Mas olerance = 3 lement prec lumber of is fornoisotopic I s9 formula(e) lements Use : 0-100 H:1 VNAPT G2-SA CCP14091712	Compositions s Analysis 2.0 PPM / 1 liction: Off otope peaks i Mass, Even Eli evaluated with d: 0-150 N: 0-50 NotSet 9 (0.185) 304.08	DBE: min = used for i-F ectron lons h 1 results w 0 0: 0-50	-1.5, max = 50 IT = 4 P: 1-1	0.0 20 closest resu BG3 129	lits for each ma	55)		17 1: TO	Page 1 Sep-2014 F MS ES+ 1.58e+006
Elemental ( Single Mas olerance = 3 lement prec lumber of is fornoisotopic I s9 formula(e) lements Use : 0-100 H:1 VNAPT G2-SA CCP14091712	Compositio s Analysis 2.0 PPM / 1 istion: Off tope peaks i mass, Even Ek evaluated with distance of the second p-150 N: 0-50 NotSet 9 (0.185)	DBE: min = used for i-F ectron lons h 1 results w 0 0: 0-50	-1.5, max = 50 IT = 4 P: 1-1 326 06 339 03 342	0.0 20 closest rest BG3.129 2.03 348.04	ults for each ma 364.01 374.02	ss) 383.02 394	.04 402.00 4	17 1 TO \$10.02 42	Page 1 
Elemental ( Single Mas olerance = 3 lement prec lumber of is fornoisotopic I s9 formula(e) lements Use : 0-100 H:1 VNAPT G2-SA CCP14091712	Compositions s Analysis 2.0 PPM / 1 liction: Off otope peaks in Mass, Even Eli- evaluated with d: 0-150 N: 0-59 NotSet 9(0.185) 304.08 301.08	DBE: min = used for i-F ectron lons h 1 results w 0 0: 0-50	-1.5, max = 50 IT = 4 P: 1-1	0.0 20 closest rest BG3.129 2.03 348.04	ults for each ma 364.01 374.02	55)		17 1 TO \$10.02 42	Page 1
Elemental ( Single Mas olerance = 1 lement prec lumber of is Moneisotopic I 86 formulac; lements Use : 0-100 H: 1 UNAPT G2-54 CP14091712 CP14091712 290	Compositions s Analysis 2.0 PPM / 1 liction: Off otope peaks in Mass, Even Eli- evaluated with d: 0-150 N: 0-59 NotSet 9(0.185) 304.08 301.08	DBE: min = used for I-F ectron lons h 1 results w 0 0:0-50 323.06	-1.5, max = 50 IT = 4 P: 1-1 <u>326 06 339 03 342</u> 330 340	0.0 20 closest rest BG3.129 2.03 348.04	ults for each ma 364.01 374.02	ss) 383.02 394	.04 402.00 4	17 1 TO \$10.02 42	Page 1 -Sep-2014 F MS ES+ 1.58e+006 001 m/2
Elemental I Single Mas Clerance = Lement prec Lumber of 18 89 formula(e) Lements Uses : 0-100 H: 1 YNAPT G2-58 -CP14091712 290 1_287.98 290 Loinuuri	Compositions s Analysis 2.0 PPM / 1 liction: Off otope peaks in Mass, Even Eli- evaluated with d: 0-150 N: 0-59 NotSet 9(0.185) 304.08 301.08	DBE: min = used for i-F ectron lons h 1 results w 0 0:0-50 323.06. 310 320	-1.5, max = 50 IT = 4 P: 1-1 326 06 339 03 342	0.0 20 closest rest BG3.129 2.03 348.04	ults for each ma 364.01 374.02	ss) 383.02 394	.04 402.00 4	17 1 TO \$10.02 42	Page 1 -Sep-2014 F MS ES+ 1.58e+006 001 m/2
Elemental ( Single Mas Olerance = Lement proc Lement proc Lements Uses Solution (Construction) Solution (Construct	Compositio s Analysis 2.0 PPM / 1 inction: Off otope peaks i Mass, Even El- evaluated with d: 0-150 N: 0-50 NotSet 9 (0.185) 304.08 301.08	DBE: min = used for I-F ectron lons h 1 results w 0 0:0-50 323.06 310 320 5.0 3	-1.5, max = 50 IT = 4 within limits (up to P: 1-1 326 06 339 03 340 330 340 -1.5 2.0 50.0	0.0 20 closest resu BG3 129 2.03 348.04 350 36	384.01 374.02 30 370	ss) <u>383 02 394</u> 380 390	.04 402.00 4	17 1 TO 11002 42	Page 1 -Sep-2014 F MS ES+ 1.58e+006 001 m/2
Elemental ( Single Mas Olerance = Element proc Element proc B8 formula(e) Elements Usec 20-100 H: 1 SYNAPT G2-54 CCP14091712 1090 1 287.98 290 Large 290 Large 290	Compositions s Analysis 2.0 PPM / 1 liction: Off otope peaks in Mass, Even Eli- evaluated with d: 0-150 N: 0-59 NotSet 9(0.185) 304.08 301.08	DBE: min = used for I-F ectron lons h 1 results w 0 0: 0-50 323.06 310 320 5.0 2	-1.5, max = 50 iT = 4 within limits (up to P: 1-1 326 06 339 03 340 -1.5	0.0 20 closest rest BG3.129 2.03 348.04	384.01 374.02 30 370	ss) 383.02 394	.04 402.00 4	17 1 TO 11002 42	Page 1 -Sep-2014 F MS ES+ 1.58e+006 001 m/2



S23

(S)-(4-(2-amino-6-oxo-9H-purin-9-yl)-2-hydroxybutyl) phosphonic acid (S)-5



		20.12	
Title	pdata/ 1	1	
Comment	BG.3.148 Na+ P31dec1H-Si D2O / opt/ topspin cp 16		
Solvent	DZO		
Number of Scans	128		
Spectrometer Frequer	icy 121.49		
Nucleus	31P		

#### Elemental Composition Report

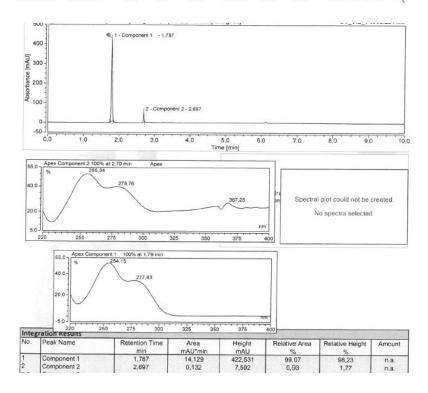
#### Page 1

Single Mass Analysis Tolerance = 2.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for I-FIT = 4

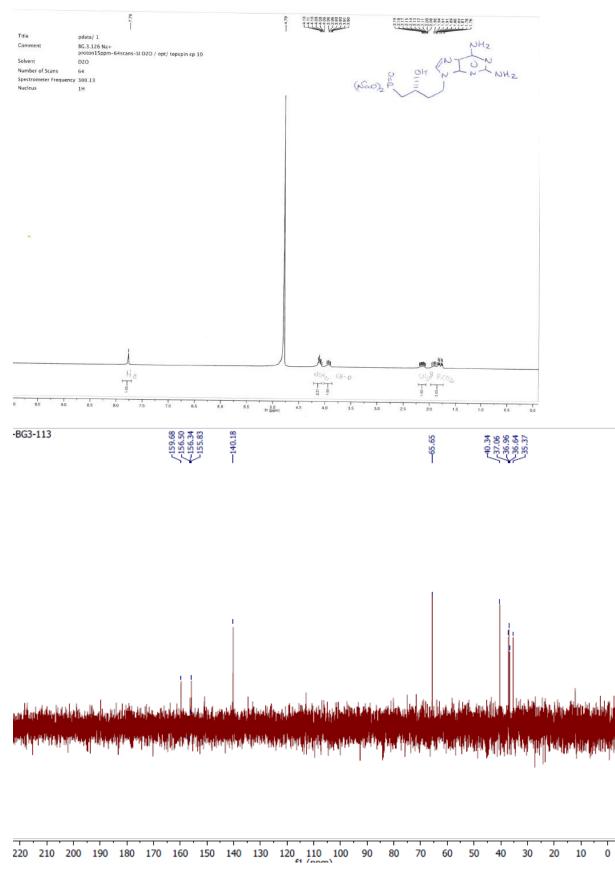
Monoisoto	pic Mass, I	Even Elect	tron lons	
489 formu	la(e) evalua	ated with '	results w	ithin limits (up to 20 closest results for each mass)
Elements				
C: 0-100	H: 0-150	N: 0-50	O: 0-50	P: 1-1

SYNAPT G2-3 Y-CP1409171	3 7 (0.143)	Cm (7	:8)			BG3	.148					1	17-Sep-2014 1: TOF MS ES+ 1.29e+006
100 301.14	304.08	09	324.0232	6.06	336.17342.	03 348.04	353.27	364.01	370.88	381.30	392.00	396.88	401.99 406.92
300	310	0	320	330	340	350	36	30	370	380	390	400	
Minimum: Maximum:			5.0	2.0	-1.5 50.0								
Mass	Calc.	Mass	mDa	PPM	DBE	i-FIT	Norm	Cor	nf(%)	Formula			

304.0813 304.0811 0.2 0.7 5.5 3667.7 n/a n/a C9 H15 N5 O5 P



(R)-(4-(2,6-diamino-9H-purin-9-yl)-2-hydroxybutyl) phosphonic acid (R)-6



Title	pdata/ 1
Comment	BG.3.126 Na+ P31dec1H-SI D2O / opt/ topspin cp 10
Solvent	D2O
Number of Scans	128
Spectrometer Frequency	121.49
Nucleus	31P

20.18

#### Elemental Composition Report

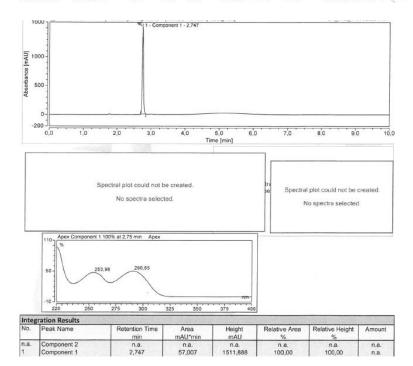
#### Page 1

Single Mass Analysis Tolerance = 2.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 4

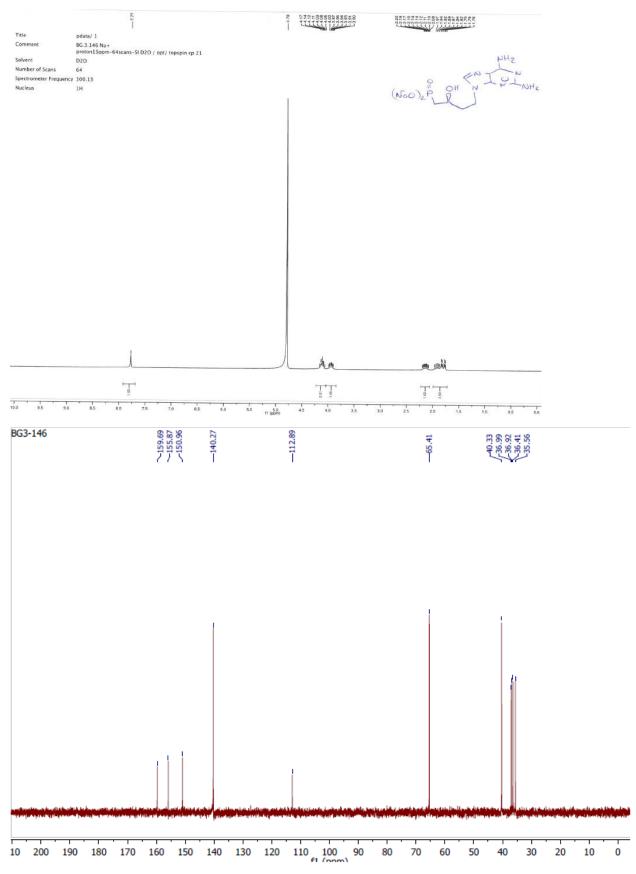
Monoisotopic Mass, Even Electron Ions 472 formula(e) evaluated with 1 results within limits (up to 20 closest results for each mass) Elements Used: C: 0-100 H: 0-150 N: 0-50 O: 0-50 P: 1-1

		#NotSet 7 (0.143	) Cm (6	5:8)			BG3.126					17-Sep- 1: TOF MS 9.17e	ES+
100	282.91	2	88.92	291.07	295.20	299.92	303.10 304.10	308.98 309.87	313.27	318.89	323.23	325 08 326 08	
0	285	5.0	290.0	D	295.0	300.0	305.0	310.0	315.0	320	0	325.0	mvz
Minim Maxim				5.0	2.0	-1.5 50.0							
Mass		Calc.	Mass	mDa	PPM	DBE	i-FIT N	lorm Conf (	<ol> <li>Formul</li> </ol>	a			

303.0968 303.0971 -0.3 -1.0 5.5 4192.1 n/a n/a C9 H16 N6 04 P



## (S)-(4-(2,6-diamino-9H-purin-9-yl)-2-hydroxybutyl) phosphonic acid (S)-6



		a l	
Title	pdata/ 1		
Comment	BG.3.146 Na+ P31dec1H-SI D2O / opt/ topspin cp 21		
	D20		
Number of Scans	128		
Spectrometer Frequency	121.49		
Nucleus	31P		

190 180 170 160 150 140 130 110 100 98 80 70 60 50 49 30 29 110 0 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100

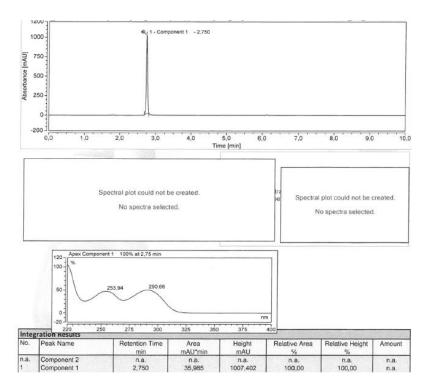
#### **Elemental Composition Report**

Page 1

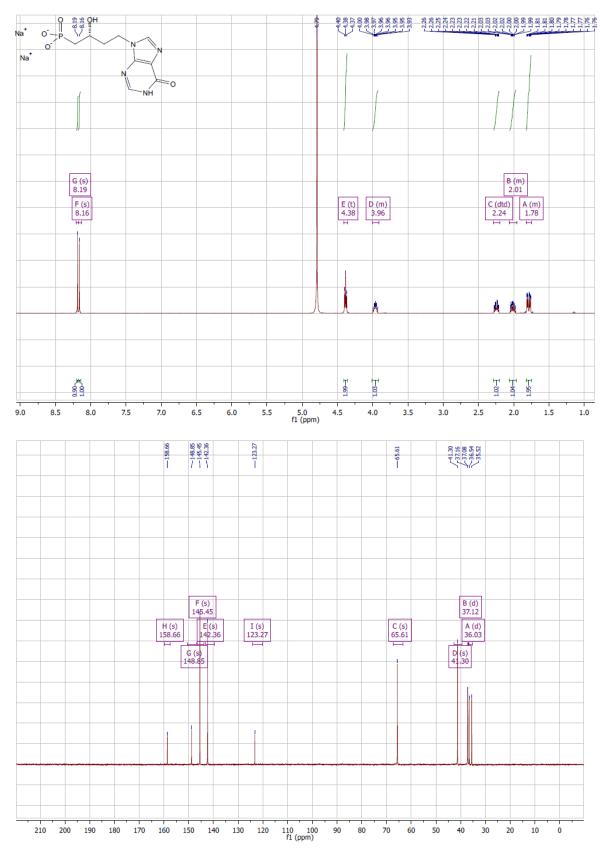
Single Mass Analysis Tolerance = 1.0 PPM / DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 4

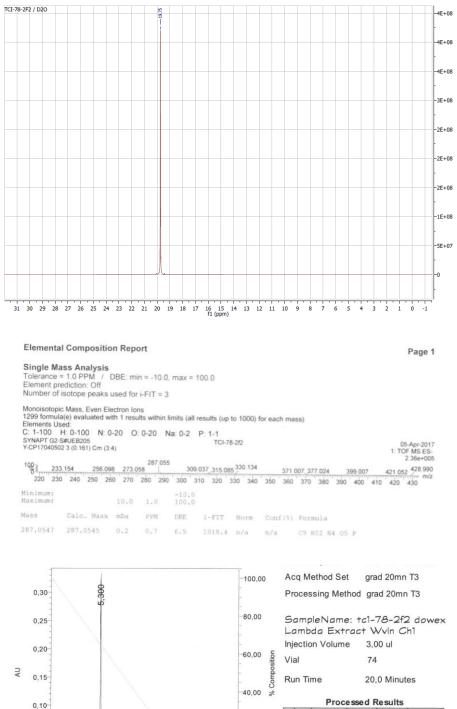
Monoisotopic Mass, Odd and Even Electron Ions 472 formula(e) evaluated with 1 results within limits (up to 20 closest results for each mass) Elements Used: C: 0-100 H: 0-100 N: 0-50 C: 0-50 P: 1-1 SYNAPT G2-SRNotSet BG3 146 Y-CP14092401 17 (0.329) 24-Sep-2014 1: TOF MS ES+ 4.47e+004 100 294.16 295.19 297.24 298.18 301.14 303.10 304.10 307.17 309.13 311.24 313.24 315.18 318.22 319.15 321.21 322.21 mz 322.5 295.0 297.5 300.0 302.5 305.0 307.5 310.0 312.5 315.0 317.5 320.0 Minimum: -1.5

Maximum:		1.0	1.0	50.0				
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Norm	Conf(%)	Formula
303.0971	303.0971	0.0	0.0	5.5	2146.2	n/a	n/a	C9 H16 N6 O4 P



# (R)-(2-hydroxy-4-(6-oxo-1,6-dihydro-9H-purin-9-yl)butyl)phosphonic acid disodic salt (R)-7



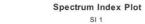


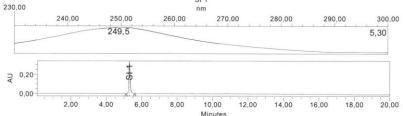


0,00 5,00 10,00 15,00 20,00 Minutes

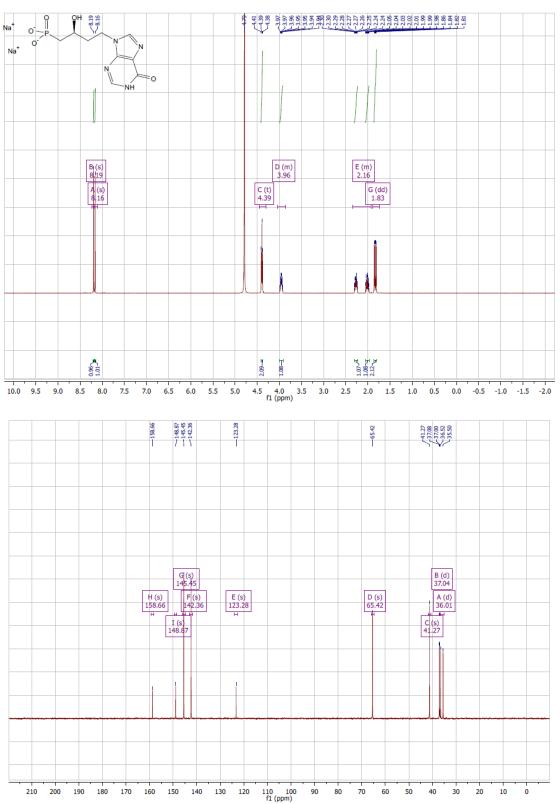
0,05

0,00

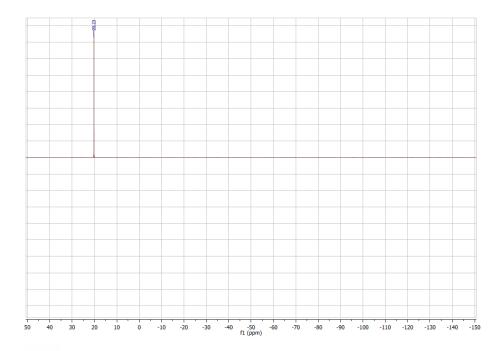




-20.00



# (S)-(2-hydroxy-4-(6-oxo-1,6-dihydro-9H-purin-9-yl)butyl) phosphonic acid disodic salt (S)-7



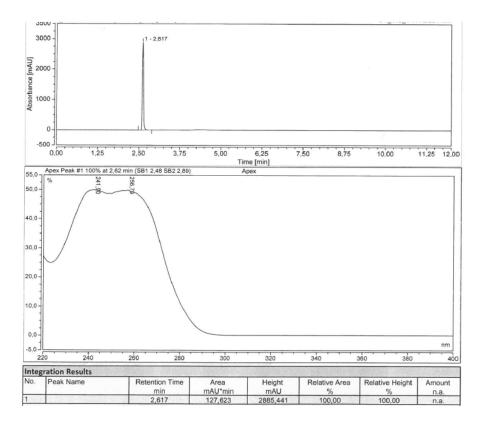
#### antal Composition Report

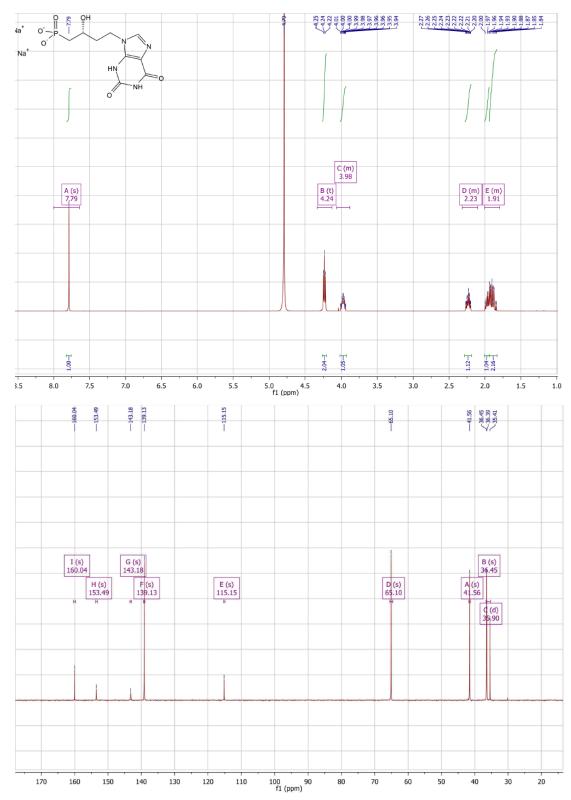
**igle Mass Analysis** Jerance = 1.0 mDa / DBE: min = -10.0, max = 100.0 Element prediction: Off Number of isotope peaks used for i-FIT = 3

SYNAPT 02-SayLEB205         TCI-72F1         29-Mar- 1: TOF MS           100-275 21 280.01         229.08         303.14         311.05 313.06         327.02         333.03         342.99         345.03         355.02         399.03         371.10           280.00         290.0         300.0         310.0         320.0         330.0         340.0         350.0         360.0         370.0           Minimum:         -10.0         -100.0         -100.0         -100.0         -100.0         -100.0         -100.0	Monoisotopio 548 formula( Elements Us C: 1-100	e) evalua	ated with	1 results v		limits (all re	sults (up	to 1000) for	each mass)				
Mod         Z <sup>25, A1</sup> 280.01         291.08         303.14         311.05_313.06         327.02         333.03         342.99         345.03         355.02         359.03         371.10           280.0         290.0         300.0         310.0         320.0         330.0         340.0         350.0         360.0         370.0           Minimum:         -10.0         -100.0         1.00         1.00         100.0         100.0	SYNAPT G2-S	S#UEB205 1 3 (0.141	5 ) Cm (3)	20 O: 0-20	-20	P. 1-1	TCI	72F1				29-Mar-2 1: TOF MS E 4.10e+	
Maximum: 1.0 1.0 100.0		280.01	291	1.2.2.2.2.2.2.2	14	111111111		1111111111	1		02	371.10	
				1.0	1.0								
Mass Calc. Mass mDa PPM DBE 1-FIT Norm Conf(%) Formula	lass	Calc.	Mass	mDa	PPM	DBE	1-FIT	Norm	Conf(%) F	ormula			

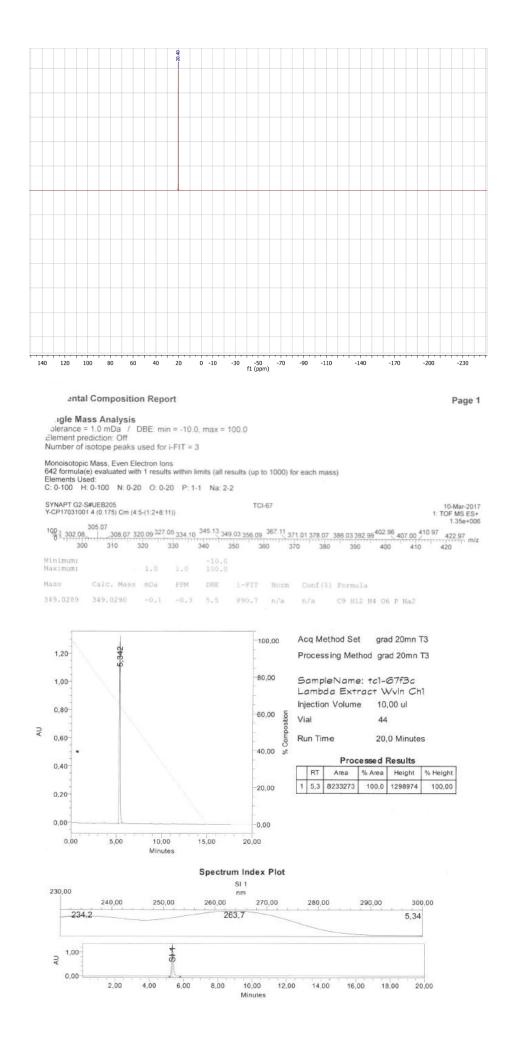
Page 1



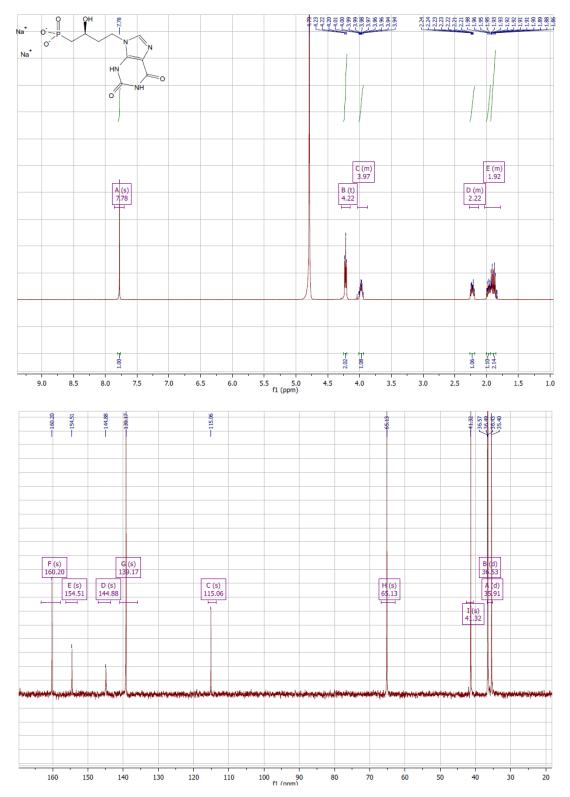




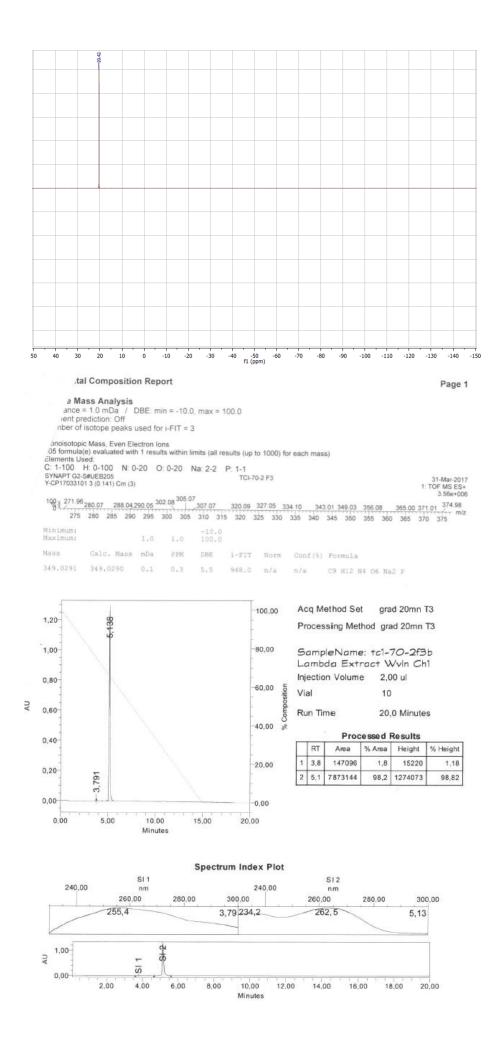
# (R)-(4-(2,6-dioxo-1,2,3,6-tetrahydro-9H-purin-9-yl)-2-hydroxybutyl)phosphonic acid disodic salt (R)-8



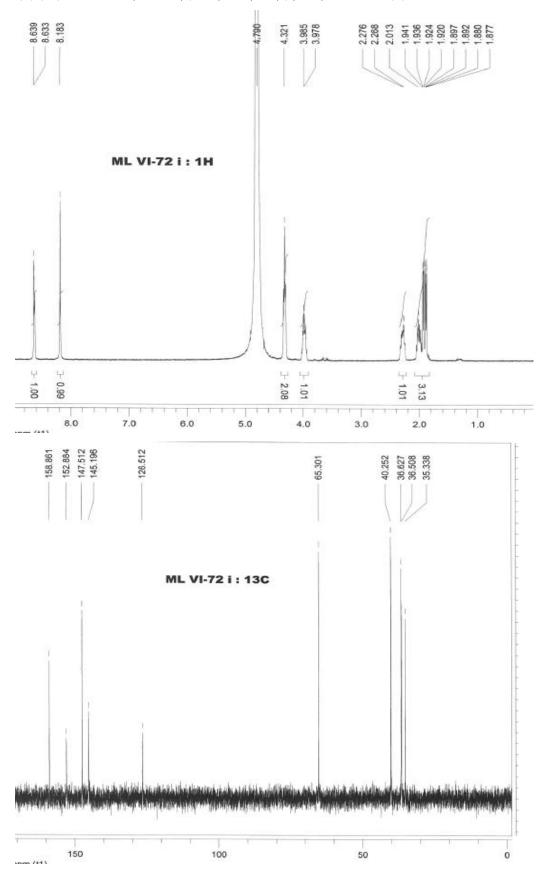
S35

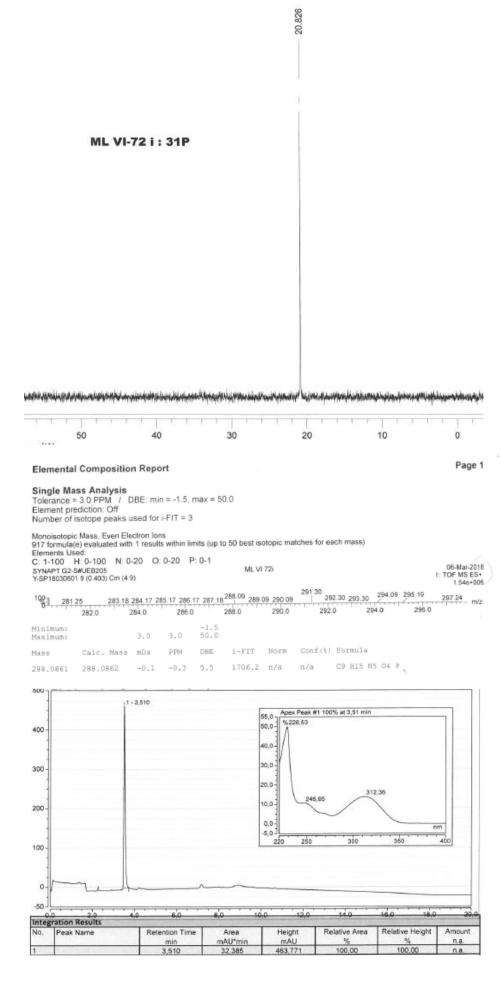


# (S)-(4-(2,6-dioxo-1,2,3,6-tetrahydro-9H-purin-9-yl)-2-hydroxybutyl)phosphonic acid disodic salt (S)-8



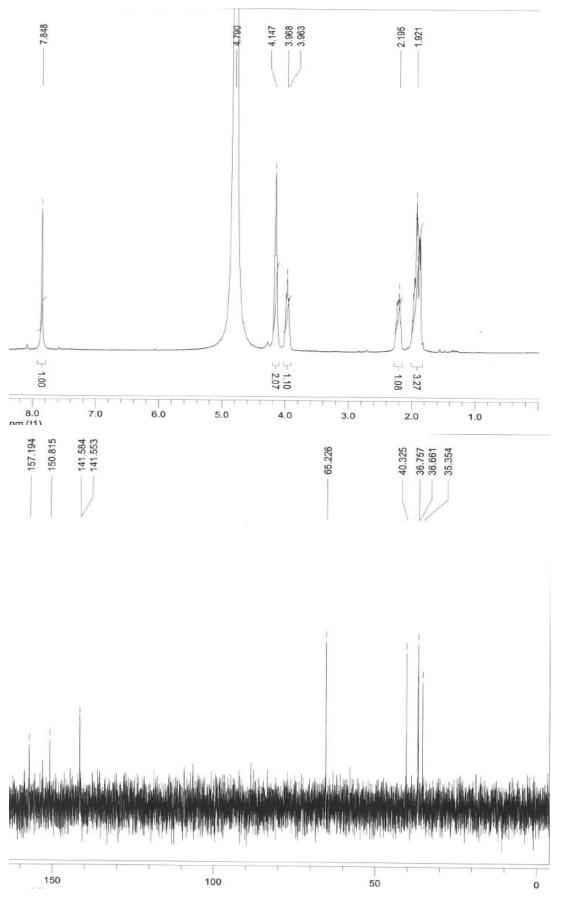
## (R)-(4-(2-amino-9H-purin-9-yl)-2-hydroxybutyl) phosphonic acid (R)-9





S39

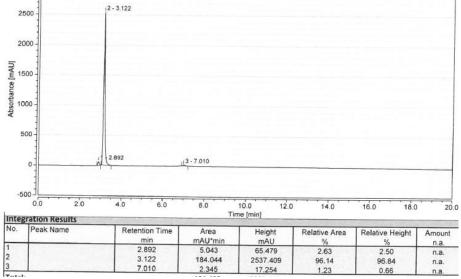
(R)-(4-(6-amino-2-fluoro-9H-purin-9-yl)-2-hydroxybutyl) phosphonic acid (R)-10



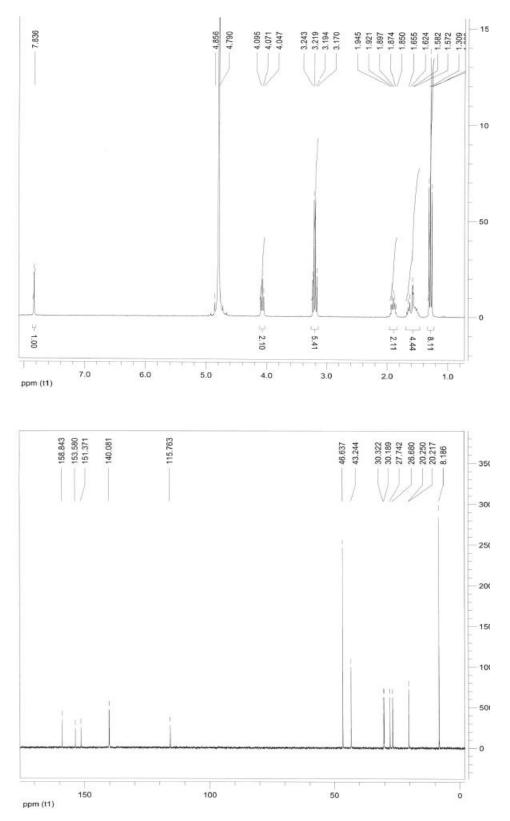


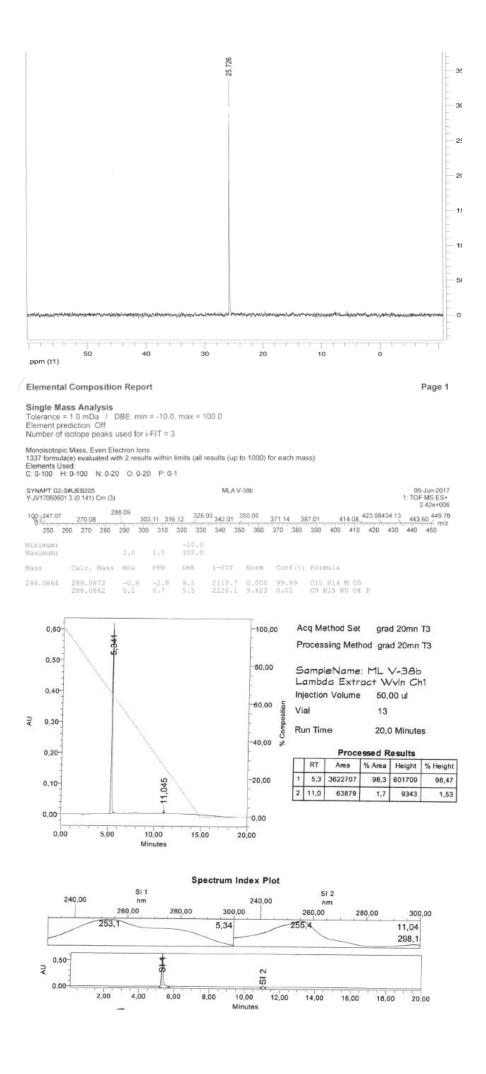
20.748

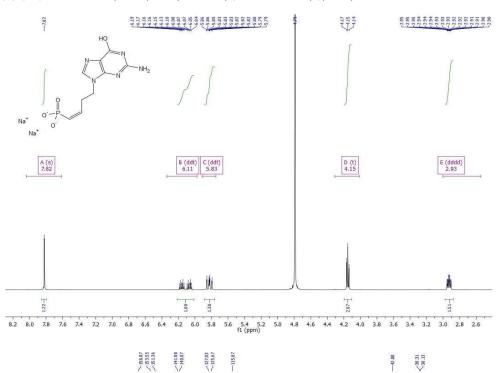
n (t1)			40		30		3	20	10	0
n //11										
Elementa	l Comp	ositio	n Repo	ort						Pag
Single Ma	iss Ana	lvsis								
Tolerance =			DBE: mi	n = -1.5.	max = 5	0.0				
Element pre	ediction:	Off								
Number of i	sotope	peaks	used for	i-FIT = (	3					
Monoisotopic	Mass F	ven Ele	actron lor	16						
1384 formula	(e) evalu				limits (up	to 50 best	isotopic m	natches for e	each mass)	
Elements Us	ed:									
C: 0-100 H SYNAPT G2-S	H: 0-100		-10 0:	0-10	F: 0-1 F					
Y-CP17100602						ML V	I-61 i			1: TOF MS I
		e								3.98e+
100 152.00	<sup>6</sup> 206.10	304.0	<sup>8</sup> 348.04	449.95	607.16	551.12 700	9	10.23 954.19	1061.76 1213.30	257.26 1365.34
100	200		400	500	600			dan	a broad and and a miss	adding and and and and a second
20.010			100	000	000	100	000 3	00 1000	1100 1200	1300 1400
Minimum: Maximum:			1.0	1000	-1.5					
Nex THUTU:			1.0	5.0	50.0					
Mass	Calc.	Mass	mDa	PPM	DBE	1-FIT	Norm	Conf(%)	Formula	
1000										
	304.08		0.9	3.0	6.5	2217.8	0.947	38.79	C8 H11 N7 05 F	
	304.08	322	-0.7	-2.3	1.5	2218.0	1.214	29.70	C6 H16 N5 O6 F	P
	304.08	822 811	-0.7	-2.3	1.5	2218.0 2218.1	1.214	29.70 27.30	C6 H16 N5 O6 F C9 H15 N5 O5 P	P
	304.08	822 911 924	-0.7	-2.3	1.5	2218.0 2218.1 2220.2	1.214 1.298 3.369	29.70 27.30 3.44	C6 H16 N5 O6 F C9 H15 N5 O5 P C10 H11 N9 O P	P
	304.08 304.08 304.08	822 911 924	-0.7 0.4 -0.9	-2.3 1.3 -3.0	1.5 5.5 10.5	2218.0 2218.1	1.214	29.70 27.30	C6 H16 N5 O6 F C9 H15 N5 O5 P	P
	304.08 304.08 304.08	822 911 924	-0.7 0.4 -0.9	-2.3 1.3 -3.0	1.5 5.5 10.5	2218.0 2218.1 2220.2	1.214 1.298 3.369	29.70 27.30 3.44	C6 H16 N5 O6 F C9 H15 N5 O5 P C10 H11 N9 O P	P
304.0815	304.08 304.08 304.08	822 911 924	-0.7 0.4 -0.9	-2.3 1.3 -3.0	1.5 5.5 10.5	2218.0 2218.1 2220.2	1.214 1.298 3.369	29.70 27.30 3.44	C6 H16 N5 O6 F C9 H15 N5 O5 P C10 H11 N9 O P	P 7.



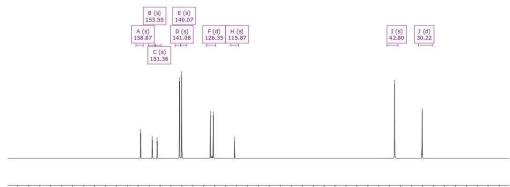
# N-9-[4-phosphonic acid-butyl]guanine, 11a

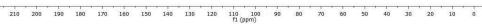


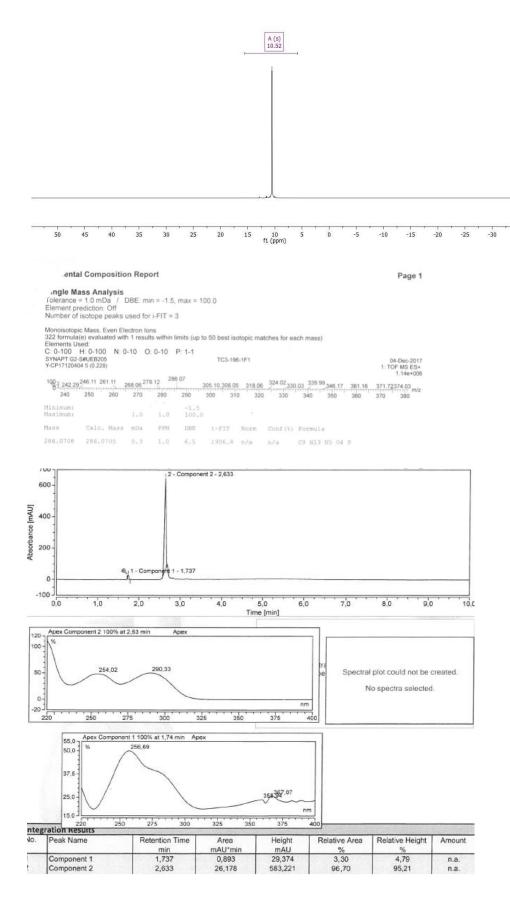




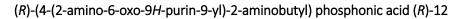
## (Z)-(4-(2-amino-6-hydroxy-9H-purin-9-yl)-but-1-en-1-yl)phosphonic acid disodic salt 11b

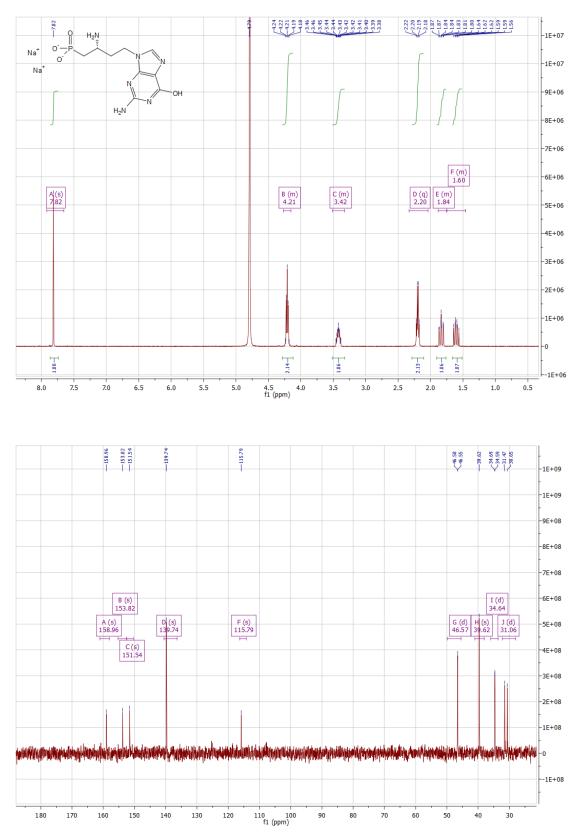


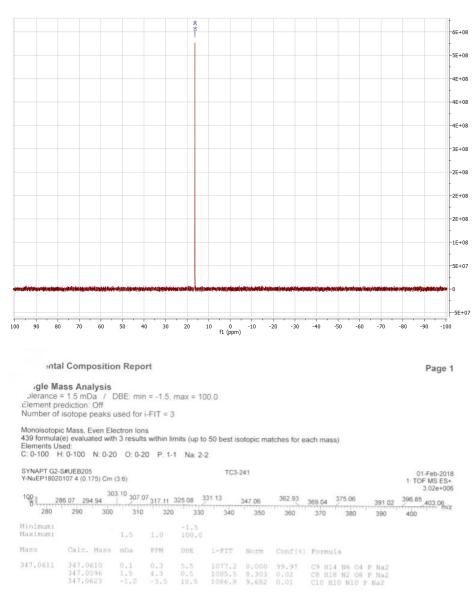


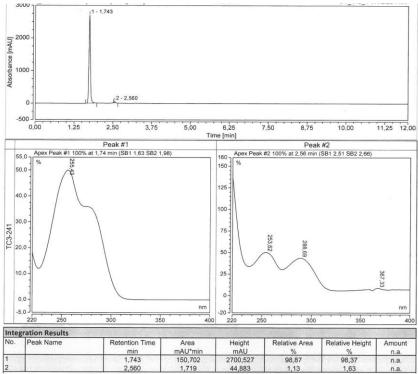


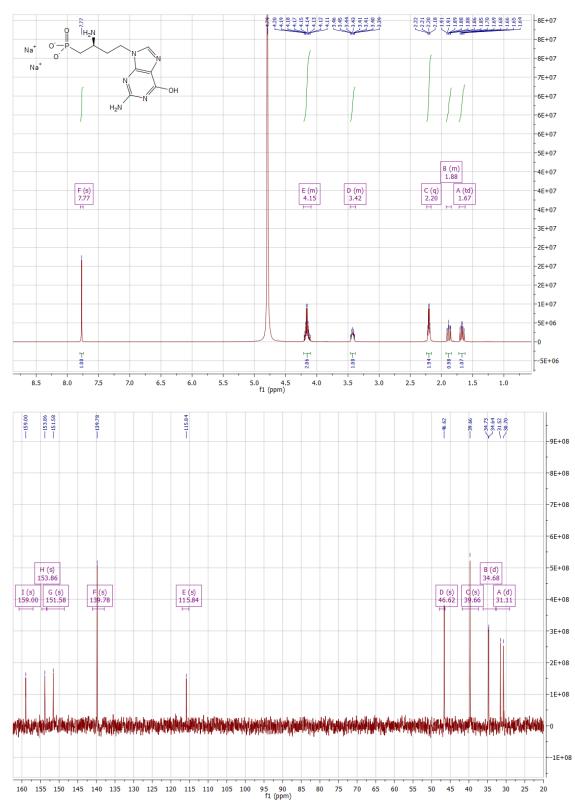
-10.52



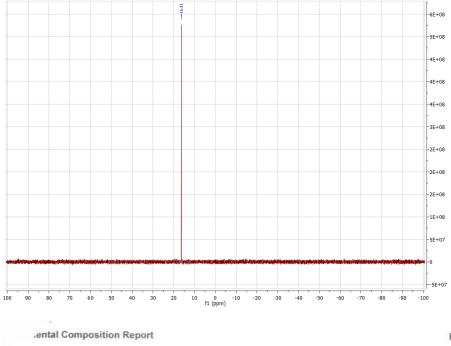








## (S)-(4-(2-amino-6-oxo-9H-purin-9-yl)-2-aminobutyl) phosphonic acid (S)-12



## Single Mass Analysis

Tolerance = 1.0 mDa / DBE: min = -1.5, max = 100.0 Element prediction: Off Number of isotope peaks used for i-FIT = 3

 
 Monoisotopic Mass, Even Electron Ions

 1693 formula(e) evaluated with 6 results within limits (up to 50 best isotopic matches for each mass)

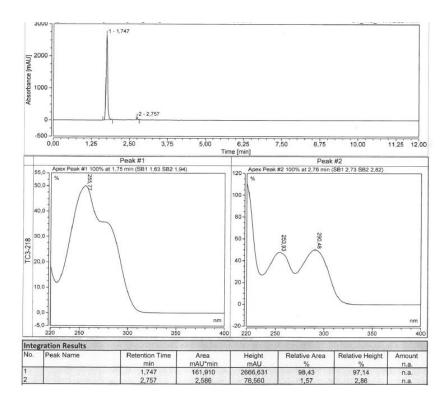
 Elements Used:

 C: 0-100
 H: 0-100
 N: 0-20
 O: 0-20
 Na: 0-2
 P: 1-1

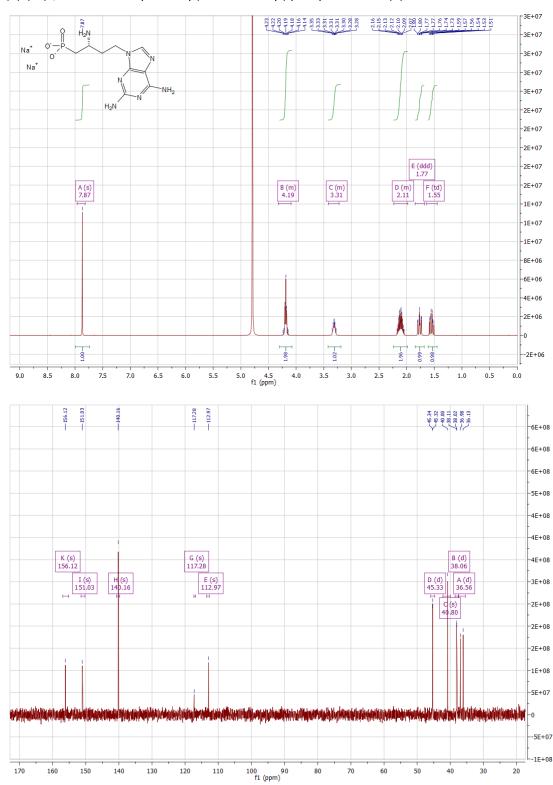
 SYNAPT G2-5#UEB205
 TC3-218

 Y-NuEP18011702 11 (0.491) Cm (10:11)
 TC3-218
 17-Jan-2018 1: TOF MS ES+ 1.03e+006 100 303 10 303 10 318 10 325 06 331 09 347 06 353 07 369 04 374 16376 12 391 03 396 14 m/z 280 290 300 310 320 330 340 350 360 370 380 390 400

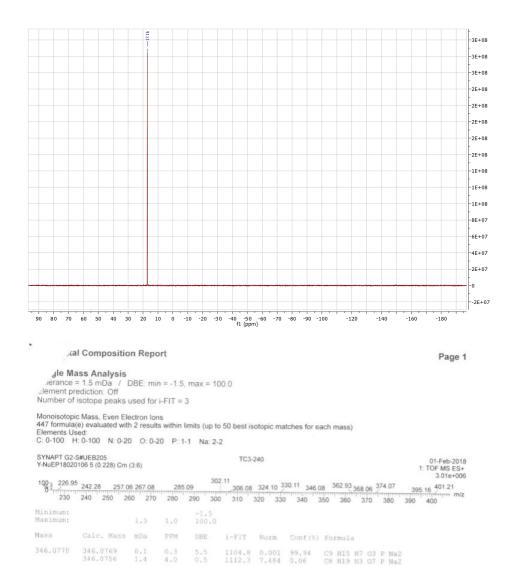
### Minimum: Maximum: Mass Calc. Mass mDa PPN DBE i-FIT Norm Conf(%) Formula 0.000 100.00 11.164 0.00 12.022 0.00 12.269 0.00 13.822 0.00 16.413 0.00 0.3 -0.5 0.1 0.9 -0.2 0.1 $0.9 \\ -1.4 \\ 0.3 \\ 2.6 \\ -0.6 \\ 0.3$ 16.5 5.5 2.5 0.5 9.5 347,0605 347.0602 724.0 735.2 736.0 736.3 737.8 C22 H13 O Na P C9 H14 N6 O4 Na2 P C7 H16 N4 O10 P C8 H18 N2 O8 Na2 P C7 H9 N12 O2 Na P C5 H4 N18 P 347.0610 347.0604 347.0596 347.0607 347.0604

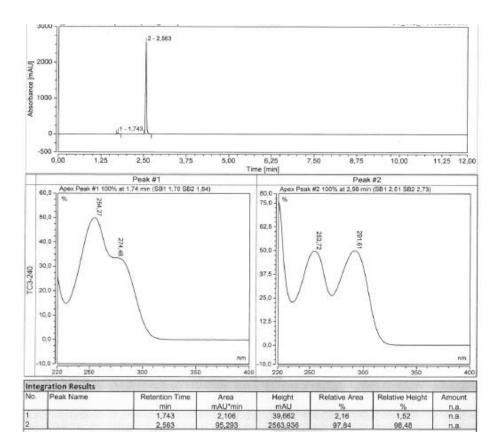


Page 1

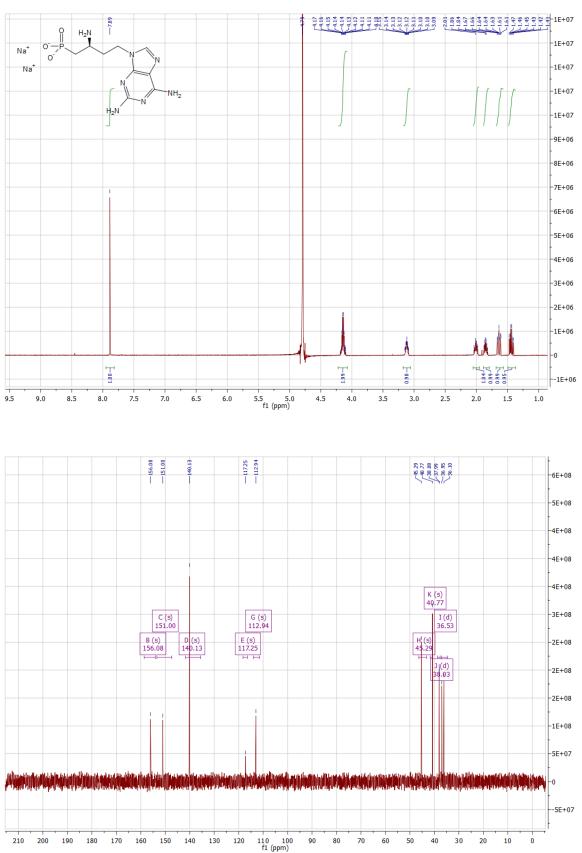


(R)-(4-(2,6-diamino-9H-purin-9-yl)-2-aminobutyl) phosphonic acid (R)-13

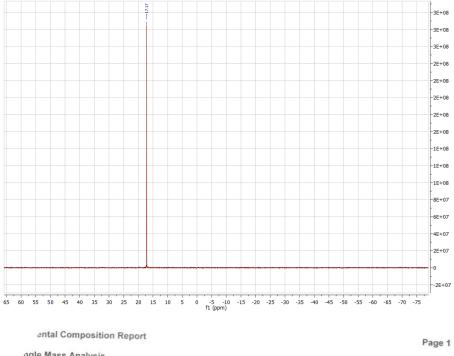




S51



## (S)-(4-(2,6-diamino-9H-purin-9-yl)-2-aminobutyl) phosphonic acid (S)-13



ngle Mass Analysis . olerance = 1.5 mDa / DBE: min = -1.5, max = 100.0 Element prediction: Off Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions 447 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass) Elements Used: C: 0-100 H: 0-100 N: 0-20 O: 0-20 P: 1-1 Na: 2-2

SYNAPT G2- Y-NuEP18020	S#UEB20 109 5 (0.2	5 229) Cr	n (5)				TC3-239					01-Feb-2018 1: TOF MS ES+
100 268.08	285.09	302.1	1306_	09 324	10 330	.14346.08	368.06	380.16 35	3 30 413	27 430.92 43	16.05	6.80e+005
	30 290	300	310	320	330	340 350	360 370	380 39	101021010000000000000000000000000000000	and the state of the second second	440 450	minuter manufactures m/z
Minimum: Maximum:			1.	5	1.0	-1.5 100.0						4 000 100000
Mass	Calc.	Mass	me	128	PPM	DBE	i-FIT	Norm	Conf(%)	Formula		
346.0769	346.0 346.0		0. 1.		0.0	5.5	482.3 485.6		96.50	C9 H15 N7 C8 H19 N3		

