Supporting Information

for

Discovery and Structure-Activity Relationship of Antagonists of B-cell Lymphoma 2 Family Proteins with Chemopotentiation Activity *in vitro* and *in vivo*

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S2 Purity data

Table. Purity data.
Final products are listed with chemical formula and combustion analyses, if performed. Boldface entry is outside the acceptable range. Analytical HPLC was performed on an Open Access ThermoFinnigan Navigator/Agilent 1100/Finnigan Xcaliber Lite system using a Phenomenex Luna C8 30 x 2 mm 5 µm column with a 4 min linear gradient from 10-100% CH_3CN; 0.1% TFA and a flow rate of 1.5 mL/min with UV detection at 220 and 254 nm (System A), and an Agilent 1100/Agilent ChemStation 9.03 system using an Agilent Zorbax C18 75 x 4.6 mm 3.5 µm column with a 6 min linear gradient from 0-100% CH_3CN; 0.1% TFA and a flow rate of 1.5 mL/min with UV detection at 254 nm (System B).

	formula	Combustion: calc. found	HPLC System A ret. time (min) % purity 220/254	HPLC System B ret. time (min) % purity 254
10	$C_{30}H_{35}N_5O_7S_2$	C, 56.15; H, 5.50; N, 10.91 C, 55.95; H, 5.54; N, 10.84		
11	$C_{25}H_{27}N_5O_5S_2$ •HCl•1.25H_2O	C, 49.99; H, 5.12; N, 11.66 C, 49.83; H, 4.79; N, 11.58		
12	$C_{27}H_{29}N_5O_6S_2$ •0.5H_2O	C, 54.72; H, 5.10; N, 11.82 C, 54.95; H, 4.94; N, 11.75		
13	$C_{28}H_{32}N_6O_6S_2$ •0.5H_2O	C, 54.09; H, 5.35; N, 13.52 C, 54.14; H, 5.12; N, 13.59		
62	$C_{31}H_{32}N_4O_6S_2$ •4.5$C_2HF_3O_2$	C, 42.37; H, 3.24; N, 4.94 C, 42.70; H, 3.11; N, 5.13		
63	$C_{31}H_{30}N_4O_7S_2$ •0.4H_2O	C, 58.00; H, 4.84; N, 8.73 C, 57.66; H, 4.44; N, 9.06		
64			2.04 99/99%	4.70 97%
65			2.37 >99/>99%	5.42 98%
66	$C_{33}H_{36}N_4O_6S_2$ •0.5$C_2HF_3O_2$	C, 57.86; H, 5.21; N, 7.94 C, 57.84; H, 5.21; N, 8.01		
67	$C_{33}H_{34}N_4O_7S_2$ •0.5H_2O	C, 59.00; H, 5.25; N, 8.34 C, 58.97; H, 5.17; N, 8.18		
68	$C_{35}H_{38}N_4O_7S_2$ •1.5$C_2HF_3O_2$	C, 52.96; H, 4.62; N, 6.50 C, 53.00; H, 4.36; N, 6.41		
69	$C_{35}H_{36}N_4O_8S_2$ •H_2O	C, 58.16; H, 5.30; N, 7.75 C, 58.36; H, 5.07; N, 7.90		
70	$C_{31}H_{31}N_3O_7S_2$ •0.25$C_2HF_3O_2$	C, 58.19; H, 4.84; N, 6.46 C, 58.04; H, 4.47; N, 6.29		
71	$C_{25}H_{26}N_4O_6S_2$	C, 55.34; H, 4.83; N, 10.32 C, 55.23; H, 4.65; N, 10.24		
72	$C_{28}H_{32}N_4O_5S_2$	C, 59.13; H, 5.67; N, 9.85		

		C, 58.87; H, 5.42; N, 9.73		
73R	$C_{32}H_{41}N_5O_5S_2$	C, 60.07; H, 6.46; N, 10.95		
		C, 59.85; H, 6.16; N, 10.80		
73S	$C_{32}H_{41}N_5O_5S_2$	C, 60.07; H, 6.46; N, 10.95		
		C, 59.91; H, 6.38; N, 10.74		
74	$C_{33}H_{43}N_5O_5S_2$	C, 59.79; H, 6.69; N, 10.57		
	$\bullet 0.5H_2O$	C, 59.74; H, 6.40; N, 10.77		
75	$C_{34}H_{45}N_5O_5S_2$	C, 50.02; H, 5.15; N, 7.58		
	$\bullet 2.25C_2HF_3O_2$	C, 50.35; H, 5.14; N, 7.80		
76	$C_{32}H_{41}N_5O_5S_2$	C, 59.65; H, 6.49; N, 10.87		
	$\bullet 0.25CH_2O_2$	C, 59.64; H, 6.27; N, 10.68		
77R	$C_{34}H_{43}N_5O_6S_2$	C, 58.79; H, 6.29; N, 9.94		
	$\bullet 0.5CH_2O_2$	C, 58.68; H, 5.99; N, 9.95		
77S	$C_{34}H_{43}N_5O_6S_2$	C, 59.11; H, 6.42; N, 10.14		
	$\bullet 0.5H_2O$	C, 58.90; H, 6.03; N, 9.81		
78	$C_{32}H_{39}N_5O_6S_2$	C, 58.79; H, 6.01; N, 10.71		
		C, 58.53; H, 5.97; N, 10.70		
79R	$C_{39}H_{47}N_5O_7S_2$	C, 51.24; H, 5.10; N, 6.95		
	$\bullet 2C_2HF_3O_2 \bullet H_2O$	C, 51.32; H, 4.74; N, 6.88		
79S	$C_{39}H_{47}N_5O_7S_2$	C, 50.54; H, 4.73; N, 6.61		
	$\bullet 2.5C_2HF_3O_2$	C, 50.47; H, 4.77; N, 6.69		
80			1.76	3.91
			97/97%	94%
81	$C_{41}H_{51}N_5O_7S_2$	C, 51.39; H, 5.02; N, 6.51		
	$\bullet 2.5C_2HF_3O_2$	C, 51.19; H, 4.90; N, 6.56		
82	$C_{39}H_{47}N_5O_7S_2$	C, 53.76; H, 5.78; N, 8.04		
	$\bullet 3HCl$	C, 54.16; H, 5.74; N, 7.95		
83	$C_{41}H_{49}N_5O_8S_2$	C, 60.57; H, 6.20; N, 8.61		
	$\bullet 0.5H_2O$	C, 60.38; H, 5.83; N, 8.44		
84	$C_{39}H_{45}N_5O_8S_2$	C, 59.00; H, 5.97; N, 8.82		
	$\bullet H_2O$	C, 59.27; H, 5.71; N, 8.67		