Supporting Information:

C1-Galactopyranosyl heterocycle structure guides selectivity: Triazoles prefer galectin-1 and oxazoles prefer galectin-3

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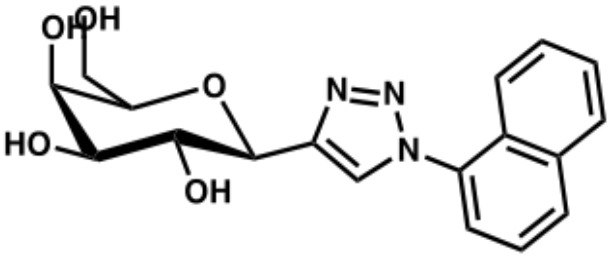
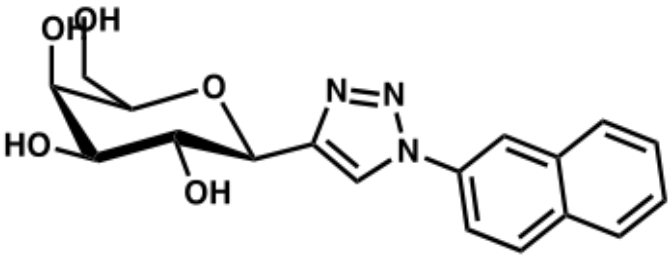
1-Naphth-1-yl-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1b



Compound **8** (100 mg, 0.280 mmol), copper(I) iodide (10 mg, 0.047 mmol) and 1-naphtyl azide (52 mg, 0.308 mmol) were dissolved in dry acetonitrile (3 mL), triethylamine (51 µL, 0.714 mmol) was added, and the reaction left overnight. The reaction was poured into ethyl acetate (30 mL) and washed with brine (30mL). The brine was extracted twice with ethyl acetate (30mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved in dry methanol (2 mL) with sodium methoxide (85 mg, 1.57 mmol) and left for 3 hours. The reaction was quenched by Amberlite IR-120 (H^+) addition to pH 7, filtered and evaporated. The crude was purified by column chromatography (5:1 dichloromethane/methanol) to give **1b** (64 mg, 66%). A prtion of 10 mg, **1b** was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) prior to galectin binding evaluations.
^{1}H NMR (400 MHz, CD_3OD): δ 8.42 (s, 1H, triazole CH), 8.18-8.12 (m, 1H), 8.07 (d, *J*=8.0 Hz, 1H), 7.71-7.56 (m, 5H), 4.55 (d, *J*=9.9 Hz, **H^1**), 4.10-3.99 (m, 2H), 3.87-3.73 (m, 3H) 3.69 (dd, *J*=9.7 Hz, 3.2 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 167.24, 146.56, 134.27, 133.52, 130.36, 128.44, 128.05, 127.61, 126.87, 126.06, 124.85, 123.51, 121.80, 79.71, 74.97, 74.88, 70.90, 69.62, 61.55
HRMS: M+H; 358.1403 found, 358.1403 calculated.
$[\alpha]^{20}_D$=16° (*c*=0.70066 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.6%

1-naphth-2-yl-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1c



Compound **8** (48 mg, 0.134 mmol), copper(I) iodide (5 mg, 0.026 mmol) and 2-naphtyl azide (25 mg, 0.147 mmol) were dissolved in dry acetonitrile (3 mL), triethylamine (25 µL, 0.350 mmol) was added, and the reaction left overnight. The

reaction was poured into ethyl acetate (30 mL) and washed with brine (30mL). The brine was extracted twice with ethyl acetate (30mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved in dry methanol (5 mL) with sodium methoxide (85 mg, 1.57 mmol) and left for 3 hours. The reaction was quenched by Amberlite IR-120 (H^+) addition to pH 7, filtered and evaporated. The crude was purified by column chromatography (5:1 dichloromethane/methanol) and prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1c** (16 mg, 33%).

^{1}H NMR (400 MHz, CD_3OD): δ 8.72 (s, 1H, triazole CH), 8.36 (d, *J*=1.8 Hz, 1H), 8.12 (d, *J*=9.0 Hz, 1H), 8.05-7.98 (m, 3H), 7.65-7.60 (m, 2H), 4.50 (d, *J*=9.9 Hz, **H^1**), 4.06-3.98 (m, 2H), 3.83 (dd, *J*=12.3, 8.7 Hz, 1H, **H^6**) 3.78-3.73 (m, 2H) 3.67 (dd, *J*=9.3 Hz, 3.4 Hz, 1H, **H^3**)

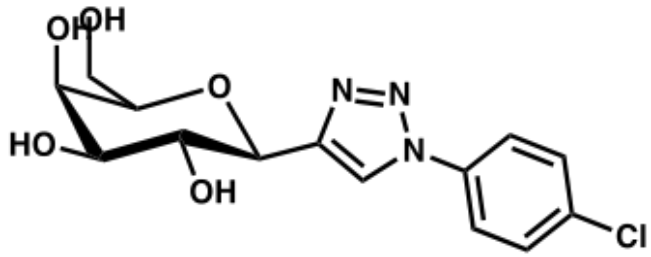
^{13}C NMR (100 MHz, CD_3OD): δ 129.76, 128.02, 127.61, 127.18, 126.81, 121.69, 118.43, 118.11, 79.68, 75.00, 74.86, 70.89, 69.58, 61.52

HRMS: M+H; 358.1412 found 358.1403 calculated.

$[\alpha]^{20}_D$=14° (*c*=0.59177 in methanol).

Purity by HPLC (UV/VIS detector 254 nm): 99.2%

1-(4-Chlorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1d



Compound **8** (25 mg, 0.070 mmol) was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). 4-Chlorophenyl azide (0.15 mL, 0.074 mmol, 0.5 M in tert-butyl methyl ether) and triethylamine (10 µL, 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3 hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1d** (7 mg, 30%).

^{1}H NMR (400 MHz, CD_3OD): δ 8.58 (s, 1H, triazole CH), 7.91-7.86 (m, 2H), 7.65-7.60 (m, 2H), 4.45 (d, *J*=9.7 Hz, **H^1**), 4.02-3.95 (m, 2H), 3.81 (dd, J1=11.7 Hz, J2=8.2, 1H, **H^6**), 3.76-3.71 (m, 2H), 3.65 (dd, J1=9.6 Hz, J2=2.9 Hz, 1H, **H^3**)

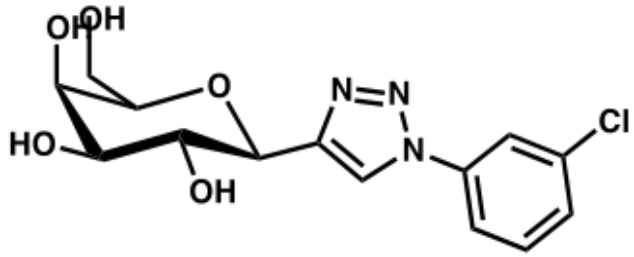
^{13}C NMR (100 MHz, CD_3OD): δ 135.73, 134.26, 129.66, 121.62, 121.54, 79.66 (C5), 74.92 (C1), 74.82 (C3), 70.85 (C2), 69.54 (C4), 61.49 (C6)

HRMS: M+H; 342.0857 found, 342.0857 calculated.

$[\alpha]^{20}_D$=25° (*c*=0.22288 in methanol).

Purity by HPLC (UV/VIS detector 254 nm): 99.8%

1-(3-Chlorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1e



Compound **8** (25 mg, 0.070 mmol) was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). 3-Chlorophenyl azide (0.15 mL, 0.074 mmol, 0.5 M in tert-butyl methyl ether) and triethylamine (10 µL, 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3 hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1e** (24 mg, 99%).

^{1}H NMR (400 MHz, CD_3OD): δ 8.63 (s, 1H, triazole CH), 7.97 (t, *J*=2.0 Hz, 1H), 7.83 (dq, *J*=4.1 Hz, 1.0 Hz, 1H), 7.57 (t, *J*=8 Hz, 1H), 7.53 (dq, J1=4Hz, 1Hz, 1H), 4.46 (d, *J*=9.7 Hz, **H^1**), 4.03-3.95 (m, 2H), 3.81 (dd, *J*=11.7 Hz, 8.2 Hz, 1H, **H^6**), 3.77-3.71 (m, 2H), 3.66 (dd, *J*=9.07 Hz, 2.9 Hz, 1H, **H^3**)

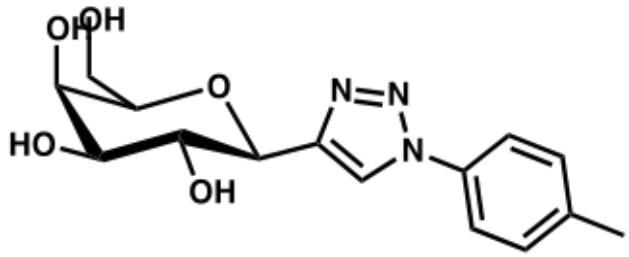
^{13}C NMR (100 MHz, CD_3OD): δ 135.73, 134.26, 129.66, 121.62, 121.54, 79.66, 74.92, 74.82, 70.85, 69.54, 61.49

HRMS: M+H; 342.0857 found, 342.0857 calculated.

$[\alpha]^{20}_D$= 15° (*c*=0.55322 in methanol).

Purity by HPLC (UV/VIS detector 254 nm): 95.1%

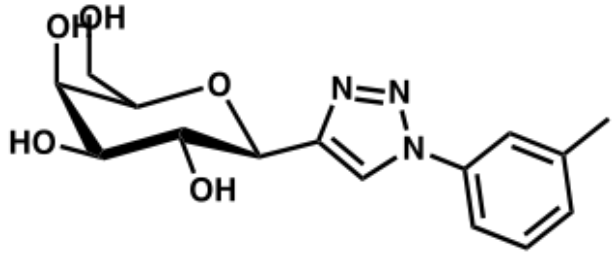
1-(4-Methylphenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1f



Compound **8** (25 mg, 0.070 mmol) was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). 4-Methylphenyl azide (0.15 mL, 0.074 mmol, 0.5 M in tert-butyl methyl ether) and triethylamine (10 µL, 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3 hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered

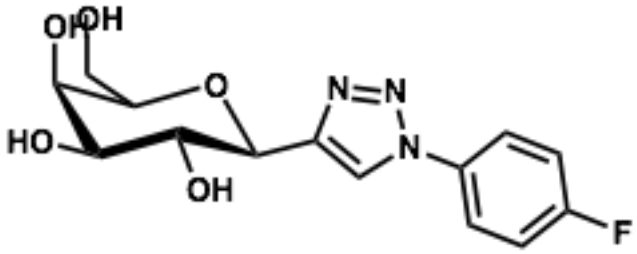
and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1f** (4 mg, 16%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.51 (s, 1H, triazole CH), 7.75-7.70 (m, 2H), 7.44-7.39 (m, 2H), 4.45 (d, *J*=9.9 Hz, **H^{1}**), 4.02-3.95 (m, 2H), 3.81 (dd, *J*=11.7 Hz, 8.2 Hz, 1H, **H^{6}**), 3.76-3.71 (m, 2H), 3.65 (dd, *J*=9.1 Hz, 2.9 Hz, 1H, **H^{3}**), 2.45 (s, 3H, phenyl methyl H_3)
^{13}C NMR (100 MHz, CD_3OD): δ 147.05, 139.14, 134.74, 129.99, 121.51, 120.12, 79.63, 74.94, 74.83, 70.86, 69.56, 61.49, 19.67
HRMS: M+H; 322.1399 found, 322.1403 calculated.
$[\alpha]^{20}_{D}$= 16° (*c*=0.12387 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 96.6%

1-(3-Methylphenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1g



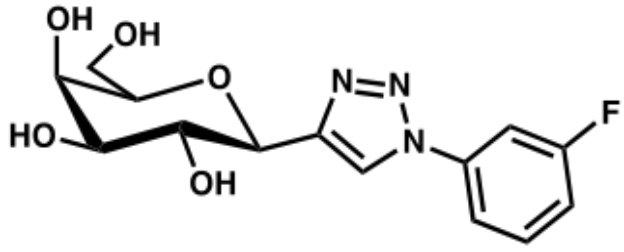
Compound **8** (25 mg, 0.070 mmol) was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). 3-Methylphenyl azide (0.15 mL, 0.074 mmol, 0.5 M in tert-butyl methyl ether) and triethylamine (10 µL, 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3 hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1g** (4 mg, 19%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.54 (s, 1H, triazole CH), 7.72-7.69 (m, 1H), 7.67-7.63 (m, 1H), 7.48 (t, *J*=7.8 Hz, 1H), 7.37-7.33 (m, 1H), 4.46 (d, *J*=9.7 Hz, **H^{1}**), 4.02-3.95 (m, 2H), 3.81 (dd, *J*=12.2 Hz, 8.2 Hz, 1H, **H^{6}**), 3.76-3.71 (m, 2H), 3.65 (dd, *J*=9.1 Hz, 3.1 Hz, 1H, **H^{3}**), 2.48 (s, 3H, phenyl methyl H_3)
^{13}C NMR (100 MHz, CD_3OD): δ 137.19, 129.39, 121.55, 120.67, 117.28, 79.65, 74.94, 74.83, 70.85, 69.56, 61.49, 19.98
HRMS: M+H; 322.1402 found, 322.1403 calculated.
$[\alpha]^{20}_{D}$= 13° (*c*=0.16830 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.6%

1-(4-Fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1h



Compound **8** (25 mg, 0.070 mmol), was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). 4-Fluorophenyl azide (0.15 mL, 0.074 mmol, 0.5M in tert-butyl methyl ether) and triethylamine (10 µL 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3 hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1h** (11 mg, 44%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.54 (s, 1H, triazole CH), 7.89-7.86 (m, 2H), 7.40-7.32 (m, 2H), 4.46 (d, *J*=9.7 Hz, **H^1**), 4.01-3.95 (m, 2H), 3.81 (dd, *J*=11.7 Hz, 8.2 Hz, 1H, **H^6**), 3.76-3.71 (m, 2H), 3.65 (dd, *J*=9.7 Hz, 2.9 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 163.81, 161.35, 147.28, 133.45, 122.49, 122.41, 121.76, 116.43, 116.19, 79.65, 74.93, 74.82, 70.85, 69.55, 61.57
HRMS: M+Na; 348.0972 found, 348.0972 calculated.
$[\alpha]^{20}_D$=22° (*c*=0.33000 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.9%

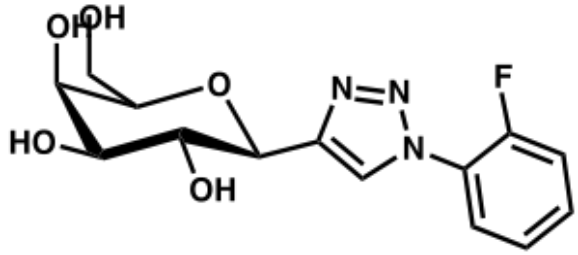
1-(3-Fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1i



Compound **8** (25 mg, 0.070 mmol) was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). 3-Fluorophenyl azide (0.15 mL, 0.074 mmol, 0.5 M in tert-butyl methyl ether) and triethylamine (10 µL, 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3

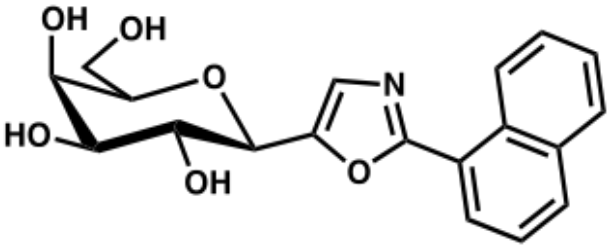
hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1i** (14.7 mg, 64%) as a lemon-yellow solid.
^{1}H NMR (400 MHz, CD_3OD): δ 8.62 (s, 1H, triazole CH), 7.76-7.70 (m, 2H), 7.67-7.59 (m, 1H), (tdd, *J*= 8.4 Hz, 2.5 Hz, 0.9 Hz, 1H), 4.46 (d, *J*=10.0 Hz, **H^1**), 4.02-3.94 (m, 2H), 3.81 (dd, *J*=12.1 Hz, 8.4 Hz, **H^6**), 3.77-3.70 (m, 2H), 3.64 (dd, *J*=9.5 Hz, 3.3 Hz, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 131.42, 131.33, 121.62, 115.71, 115.38, 115.16, 107.7, 107.44, 79.67, 74.91, 74.82 , 70.84, 69.55, 61.49
HRMS: M+H; 326.1155 found, 326.1152 calculated.
$[\alpha]^{20}_D$=24° (*c*=0.35414 in methanol.)
Purity by HPLC (UV/VIS detector 254 nm): 99.7%

1-(2-Fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)-1H-1,2,3-triazole 1j



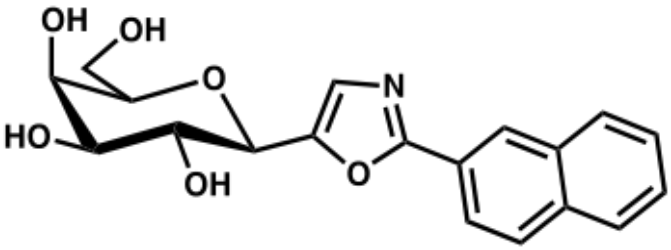
Compound **8** (25 mg, 0.070 mmol) was dissolved in dry acetonitrile (2 mL) with copper(I) iodide (3 mg, 0.014 mmol). Phenyl azide (0.15 mL, 0.074 mmol, 0.5 M in tert-butyl methyl ether) and triethylamine (10 µL, 0.140 mmol) were added. The reaction was left overnight at room temperature, then poured into ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted twice with ethyl acetate (20 mL), the organic phases pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved inof dry methanol (2 mL) with sodium methoxide (23 mg, 0.420 mmol) and left for 3 hours. The reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. The crude was purified with prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) to give **1j** (4.5 mg, , 20%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.46 (d,*J*=2.3 Hz, 1H, triazole CH), 7.91-7.85 (m, 1H), 7.63-7.57 (m, 1H), 7.53-7.41 (m, 2H), 4.48 (d, *J*=9.8 Hz, **H^1**), 4.02-3.96 (m, 2H), 3.82 (dd, *J*=13.0 Hz, 8.7 Hz, 1H, **H^6**), 3.77-3.71 (m, 2H), 3.65 (dd, *J*=9.6 Hz, 3.3 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 130.94, 130.86, 125.26, 125.12, 124.71, 124.65, 116.88, 116.68, 79.69, 74.86, 74.83, 70.85, 69.58, 61.52
HRMS: M+H; 326.1149 found, 326.1152 calculated.
$[\alpha]^{20}_D$=21° (*c*=0.16455 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.3%

2-Naphth-1-yl-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2b



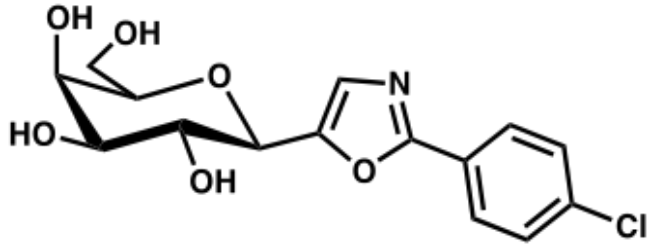
Compound **10b** (20 mg, 0.039 mmol) and of sodium methoxide (13 mg, 0.232 mmol) were dissolved in dry methanol (4mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2b** (7 mg, 52%).
^{1}H NMR (400 MHz, CD_3OD): δ 9.09-9.05 (m, 1H), 8.21 (dd, *J*=7.3 Hz, 1.1 Hz, 1H), 8.07 (d, *J*=8.4 Hz, 1H), 8.01-7.97 (m, 1H), 7.68-7.57 (m, 3H), 7.44 (s, 1H oxazole C**H**), 4.45 (d, *J*= 9.9 Hz, 1H, **H^1**), 4.14 (t, *J*=9.6 Hz 1H, **H^2**), 4.00 (dd *J*=3.2 Hz, 0.6 Hz, 1H **H^4**), 3.82 (dd, *J*=11.9 Hz, 8.42 Hz, 1H, **H^6**) 3.78-3.72 (m, 2H), 3.65 (dd, *J*=9.3 Hz, 3.3 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 150.09, 131.13, 128.29, 127.86, 127.14, 126.69, 126.081, 125.50, 124.68, 79.69, 74.89, 74.03, 69.43, 69.15, 61.43
HRMS: M+H; 358.1286 found, 358.1291 calculated.
$[\alpha]^{20}_D$= 26° (*c*=0.33409 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 95.2%

2-Naphth-2-yl-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2c



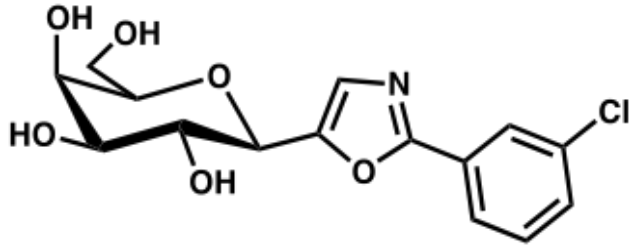
Compound **10c** (30 mg, 0.057 mmol) and sodium methoxide (19 mg, 0.343 mmol) were dissolved in dry methanol (4 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2c** (6 mg, 29%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.61 (s, 1H), 8.14 (dd, J1=8.5 Hz, 1.7 Hz, 1H), 8.04-7.99 (m, 2H), 7.97-7.93 (m, 1H), 7.63-7.57 (m, 2H), 7.37 (s, 1H, oxazole C**H**), 4.43 (d, *J*=9.8 Hz, 1H, **H^1**), 4.14 (t, *J*=9.4 Hz, 1H, **H^2**), 4.02 (d, *J*=3.2 Hz, 1H, **H^6**), 3.87-3.71 (m, 3H), 3.64 (dd, *J*=9.4 Hz, 3.2 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 150.21, 134.37, 133.09, 128.50, 128.35, 127.54, 127.31, 126.81, 126.71, 126.15, 124.18, 122.65, 79.67, 74.84, 73.99, 69.41, 69.03, 61.42
HRMS: M+H; 358.1289 found, 358.1291 calculated.
$[\alpha]^{20}_D$= 14° (*c*=0.22014 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 96.6%

2-(4-Chlorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2d



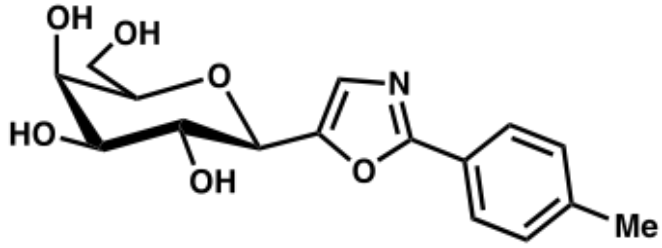
Compound **10d** (10 mg, 0.019 mmol) and of sodium methoxide (6 mg, 0.117 mmol) were dissolved in dry methanol (4 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2d** (2 mg, 30%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.08-8.03 (m, 2H), 7.58-7.52 (m, 2H), 7.31 (s, 1H, oxazole CH), 4.38 (d, *J*= 9.5 Hz, 1H, **H^1**), 4.07 (t, *J*=9.9 Hz 1H, **H^2**), 3.99 (d *J*=3.1 Hz, 1H **H^6**), 3.82-3.68 (m, 3H), 3.61 (dd, *J*=9.4 Hz, 3.4 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 128.91, 127.51, 126.82, 79.64, 74.79, 73.90, 69.36, 69.01, 61.39
HRMS: M+H; 342.0743 found, 342.0744 calculated.
$[\alpha]^{20}_D$= 18° (*c*=0.14658 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 97.1%

2-(3-Chlorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2e



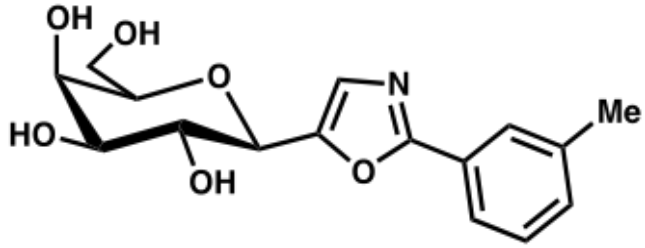
Compound **10e** (10 mg, 0.019 mmol) and sodium methoxide (6 mg, 0.117 mmol) were dissolved in dry methanol (4 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2e** (2 mg, 30%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.10-8.07 (m, 1H), 8.02-7.98 (m, 1H), 7.56-7.49 (m, 2H), 7.33 (s, 1H, oxazole CH), 4.39 (d, *J*= 9.8 Hz, 1H, **H^1**), 4.08 (t, *J*=9.8 Hz 1H, **H^2**), 3.99 (d *J*=3.4 Hz, 1H **H^6**), 3.83-3.69 (m, 3H), 3.61 (dd, *J*=9.5 Hz, 3.4 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 150.56, 134.68, 130.33, 128.81, 126.94, 125.85, 124.26, 79.68, 74.79, 73.90, 69.40, 68.98, 61.41
HRMS: M+H; 342.0744 found, 342.0744 calculated.
$[\alpha]^{20}_D$= 12° (*c*=0.09179 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.5%

2-(4-Methylphenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2f



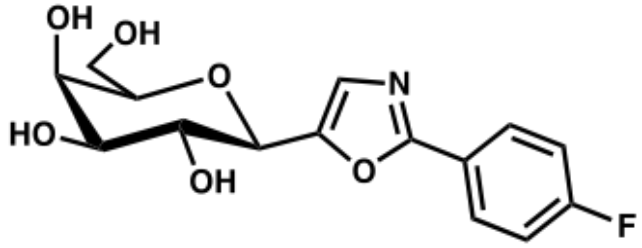
Compound **10f** (3.3 mg, 0.007 mmol) and sodium methoxide (2 mg, 0.040 mmol) were dissolved inof dry methanol (2 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2f** (1 mg, 46%).
^{1}H NMR (400 MHz, CD_3OD): δ 7.97-7-93 (m, 2H), 7.37-7.32 (m, 2H), 7.28 (s, 1H, oxazole CH), 4.37 (d, *J*= 9.8 Hz, 1H, **H^1**), 4.08 (t, *J*=9.5 Hz 1H, **H^2**), 3.99 (d *J*=3.3 Hz, 1H **H^6**), 3.83-3.68 (m, 3H), 3.61 (dd, *J*=9.5Hz, 3.6 Hz, 1H, **H^3**), 2.45 (s, 3H, phenyl methyl)
^{13}C NMR (100 MHz, CD_3OD): δ 129.26, 126.42, 126.03, 79.63, 74.85, 73.95, 69.40, 68.97, 61.41, 20.07
HRMS: M+H; 322.1293 found, 322.1291 calculated.
$[\alpha]^{20}_D$= 16° (*c*=0.005289 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.1%

2-(3-Methylphenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2g



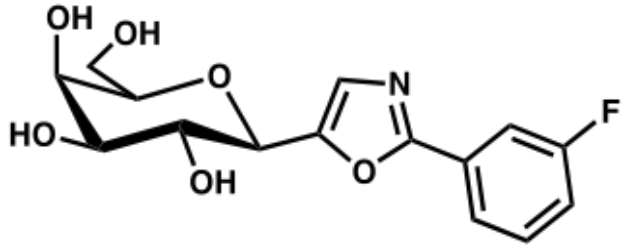
Compound **10g** (22 mg, 0.045 mmol) and sodium methoxide (15 mg, 0.270 mmol) were dissolved in dry methanol (4 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2g** (7 mg, 46%).
^{1}H NMR (400 MHz, CD_3OD): δ 7.90 (s, 1H), 7.85 (d, *J*= 7.7 Hz, 1H), 7.40 (t, *J*=7.6 Hz, 1H), 7.35 (d, *J*=7.7 Hz, 1H), 4.38 (d, *J*= 9.7 Hz, 1H, **H^1**), 4.09 (t, *J*=9.7 Hz 1H, **H^2**), 3.99 (d *J*=3.4 Hz, 1H **H^6**), 3.83-3.68 (m, 3H), 3.61 (dd, *J*=9.3 Hz, 3.5 Hz, 1H, **H^3**), 2.44 (s, 3H, phenyl methyl)
^{13}C NMR (100 MHz, CD_3OD): δ 149.94, 138.68, 131.23, 128.56, 126.84, 126.52, 126.50, 123.21, 79.64, 74.84, 73.95, 69.40, 68.98, 61.41, 19.95
HRMS: M+H; 322.1288 found, 322.1291 calculated.
$[\alpha]^{20}_D$= 17° (*c*=0.21697 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.5%

2-(4-Fluorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2h



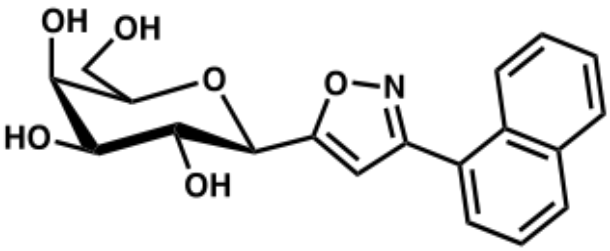
Compound **2h** (7 mg, 0.014 mmol) and sodium methoxide (5 mg, 0.085 mmol) were dissolved in dry methanol (2 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2h** (2 mg, 43%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.14-8.07 (m, 2H), 7.32-7.23 (m, 3H) 4.37 (d, *J*= 10.0 Hz, 1H, **H^1**), 4.08 (t, *J*=8.9 Hz 1H, **H^2**), 3.98 (d *J*=3.3 Hz, 1H **H^6**), 3.83-3.68 (m, 3H), 3.61 (dd, *J*=9.4Hz, 3.4 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 128.46, 128.38, 126.64, 115.79, 115.56, 79.63, 74.82, 73.91, 69.38, 68.98, 61.40
HRMS: M+H; 326.1035 found, 326.1040 calculated.
$[\alpha]^{20}_D$= 18° (*c*=0.07776 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 96.6%

2-(3-Fluorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole 2i



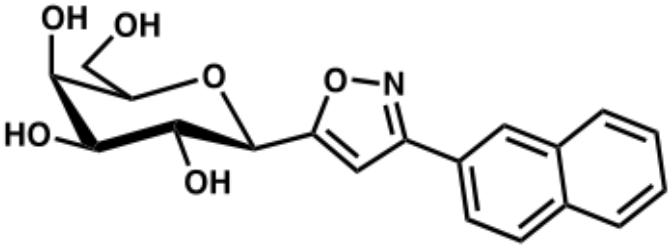
Compound **10i** (10 mg, 0.020 mmol) and sodium methoxide (7 mg, 0.122 mmol) were dissolved in dry methanol (2 mL) under nitrogen. After 3 hours, the reaction was quenched with Amberlite IR-120 (H^+) to pH 7, filtered and evaporated. Prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **2i** (1 mg, 18%).
^{1}H NMR (400 MHz, CD_3OD): δ 7.90 (ddd, *J*= 7.8 Hz, 1.7 Hz, 0.9 Hz, 1H), 7.79 (ddd, *J*= 9.8 Hz, 2.6 Hz, 1.5 Hz), 7.59-7.52 (m, 1H), 7.33 (s, 1H, oxazole CH), 7.28 (tdd, *J*= 8.5 Hz, 2.7 Hz, 0.8 Hz, 1H), 4.39 (d, *J*= 9.8 Hz, 1H, **H^1**), 4.08 (t, *J*=8.4 Hz 1H, **H^2**), 3.99 (d *J*=3.3 Hz, 1H **H^6**), 3.83-3.68 (m, 3H), 3.61 (dd, *J*=9.4 Hz, 3.3 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 130.79, 126.89, 121.92, 117.31, 79.67, 74.80, 73.90, 69.38, 69.01, 61.40
HRMS: M+H; 326.1035 found, 326.1040 calculated.
$[\alpha]^{20}_D$= 19° (*c*=0.06491 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.2%

3-Naphth-1-yl-5-(1-deoxy-β-D-galactopyranosyl)isoxazole 3b



Compound **9b** (84 mg, 0.165 mmol) was dissolved in dry THF (3 mL) with hydroxylamine hydrochloride (29 mg, 0.411 mmol) and of sodium carbonate (71 mg, 0.666 mmol) and refluxed overnight under nitrogen. The reaction was poured into ethyl acetate (30 mL) and washed with brine. The brine was extracted two times with ethyl acetate (30mL), the organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved in dry methanol (2 mL) with of sodium methoxide (39 mg, 0.708 mmol). After 3 hours, the reaction was quenched by addition of Amberlite IR-120 (H^+) until pH 7, filtered & evaporated. The crude was purified first with column chromatography (5:1 dichloromethane/methanol) and then with prep-HPLC to give **3b** (11 mg, 11%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.36-8.31 (m, 1H), 8.06 (d, *J*=8.2 Hz, 1H), 8.03-7.98 (m, 1H), 7.89-7.84 (m, 1H), 7.62 (3H, m), 7.05 (s, 1H isoxazole C**H**), 4.37 (d, *J*= 10.0 Hz, 1H, **H^1**), 4.01 (d, *J*=3.1 Hz, 1H, **H^4**), 3.89 (t, *J*=9.4 Hz 1H, **H^2**), 3.81 (dd *J*=10.0 Hz, 4.3 Hz 1H **H^5**), 3.77-3.68 (m, 2H), 3.64 (dd, *J*=9.4Hz, 3.3 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 169.75, 163.40, 133.96, 130.67, 130.10, 128.44, 127.28, 127.08, 126.17, 124.90, 124.44, 102.37, 79.72, 75.13, 74.65, 70.11, 69.42, 61.45
HRMS: M+Na; 380.1115 found, 380.1110 calculated.
$[\alpha]^{20}_D$=21° (*c*=0.23211 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 99.3%

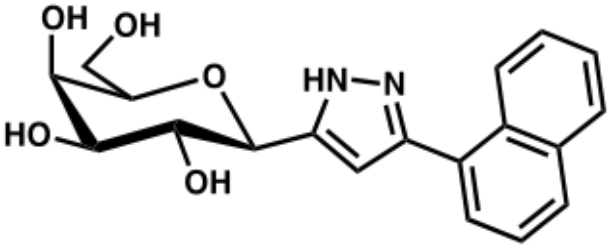
3-Naphth-2-yl-5-(1-deoxy- β-D-galactopyranosyl)isoxazole 3c



Compound **9c** (79 mg, 0.155 mmol) was dissolved in dry THF (3 mL) with hydroxylamine hydrochloride (27 mg, 0.388 mmol) and sodium carbonate (30 mg, 0.620 mmol) and refluxed overnight under nitrogen. The reaction was poured into ethyl acetate (30 mL) and washed with brine. The brine was extracted two times with ethyl acetate (30mL), the organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. The crude was dissolved in dry methanol (2 mL) with of sodium methoxide (16 mg, 0.422 mmol). After 3 hours the reaction was quenched by addition of Amberlite IR-120 (H^+) until pH 7, filtered & evaporated. The crude was purified first with column chromatography (5:1 dichloromethane/methanol) and then with prep-HPLC to give **3c** (17 mg, 40%).

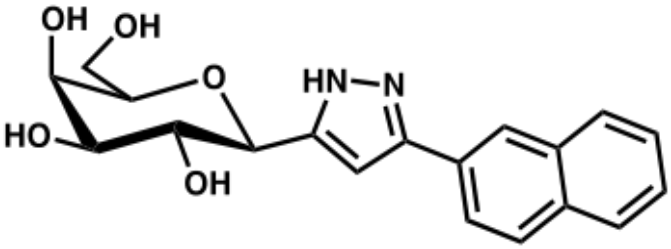
^{1}H NMR (400 MHz, CD_3OD): δ 8.41 (d, *J*=1.2 Hz, 1H), 8.04-8.00 (m, 2H), 7.95-7.91 (m, 2H), 7.61-7.57 (m, 2H) 7.11 (s, 1H isoxazole C**H**), 4.37 (d, *J*= 10.0 Hz, 1H, **H^{1}**), 4.01 (d, *J*=3.1 Hz, 1H, **H^{4}**), 3.89 (t, *J*=9.4 Hz 1H, **H^{2}**), 3.81 (dd *J*=10.0 Hz, 4.3 Hz 1H **H^{5}**), 3.77-3.68 (m, 2H), 3.64 (dd, *J*=9.4Hz, 3.2 Hz, 1H, **H^{3}**)
^{13}C NMR (100 MHz, CD_3OD): δ 128.68, 128.31, 127.51, 127.12, 126.69, 124.98, 122.40, 98.74, 79.72, 75.13, 74.65, 70.11, 69.42, 61.45
HRMS: M+H; 358.1292 found 358.1291 calculated
$[\alpha]^{20}_{D}$= 21° (*c*=0.22913 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 96.6%

3-Naphth-1-yl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole 4b



Compound **9b** (137 mg, 0.269 mmol) was dissolved in THF (6 mL) and sodium carbonate (120 mg, 1.128 mmol) and hydrazine hydrate (130 µL, 1.694 mmol, 64%) were added. The reaction mixture was refluxed overnight, cooled to room temperature, filtrated and evaporated. Column chromatography (5:1 dichloro-methane/methanol) followed by prep-HPLC (20 min gradient from 10% acetoni-trile/90% water with 0.1% formic acid to 100% acetonitrile) gave **4b** (74 mg, 77%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.31-8.25 (m, 1H), 7.96-7.89 (m, 2H), 7.62 (dd, *J*=7.2, Hz, 1.2 Hz, 1H), 7.57-7.47 (m, 3H) 6.77 (s, 1H pyrazole C**H**), 4.33 (d, *J*= 9.9 Hz, 1H, **H^{1}**), 3.98 (d, *J*=3.0 Hz, 1H, **H^{4}**), 3.90 (t, *J*=9.6 Hz 1H, **H^{2}**), 3.83 (dd *J*=11.2 Hz, 7.1 Hz, 1H **H^{5}**), 3.77-3.68 (m, 2H), 3.61 (dd, *J*=9.0 Hz, 3.3 Hz, 1H, **H^{3}**)
^{13}C NMR (100 MHz, CD_3OD): δ 146.76, 133.96, 131.36, 129.87, 128.37, 128.00, 126.77, 125.66, 125.28, 124.93, 101.12, 79.45, 75.70, 74.89, 70.95, 69.56, 61.57
HRMS: M+H; 357.1459 found, 357.1450 calculated.
$[\alpha]^{20}_{D}$= 19° (*c*=0.22521 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 97.3%

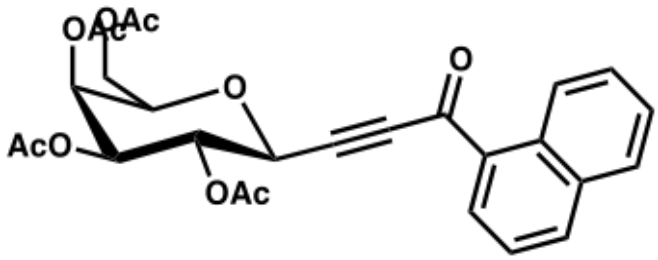
3-Naphth-2-yl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole 4c



Compound **9c** (146 mg, 0.286 mmol) was dissolved in THF (6 mL) and sodium carbonate (76 mg, 0.715 mmol) and hydrazine hydrate (32 µL, 0.429 mmol, 64%) were added. The reaction mixture was refluxed overnight, poured into ethyl acetate (30mL), washed with brine (30mL) which was extracted twice with ethyl acetate (30mL). The organic phases were pooled, dried with sodium sulfate

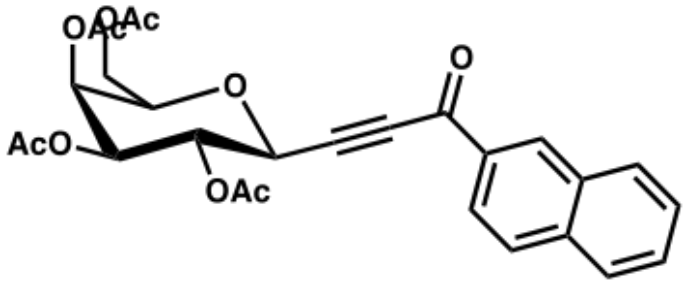
and evaporated. The crude was dissolved in dry methanol (6 mL) with sodium methoxide (187 mg, 3.46 mmol) under nitrogen and left for 4 hours. Upon completion, the reaction was quenched with Amberlite IR-120 (H^+) until pH 7, filtered and evaporated. Column chromatography (5:1 dichloromethane/methanol) followed by prep-HPLC (20 min gradient from 10% acetonitrile/90% water with 0.1% formic acid to 100% acetonitrile) gave **4c** (90 mg, 88%).
^{1}H NMR (400 MHz, CD_3OD): δ 8.24 (s, 1H), 7.99-7.80 (m, 4H), 7.55-7.44 (m, 2H), 6.92 (s, 1H pyrazole C**H**), 4.33 (d, *J*= 9.9 Hz, 1H, **H^1**), 3.98 (d, *J*=3.0 Hz, 1H, **H^4**), 3.90 (t, *J*=9.6 Hz 1H, **H^2**), 3.83 (dd *J*=11.2 Hz, 7.1 1H **H^5**), 3.77-3.68 (m, 2H), 3.61 (dd, *J*=9.0 Hz, 3.3 Hz, 1H, **H^3**)
^{13}C NMR (100 MHz, CD_3OD): δ 133.63, 133.13, 127.75, 127.33, 123.78, 101.44, 79.45, 75.70, 74.89, 70.95, 69.56, 61.57
HRMS: M+H; 357.1457 found, 157.1450 calculated.
$[\alpha]^{20}_D$= 23° (*c*=0.42031 in methanol).
Purity by HPLC (UV/VIS detector 254 nm): 97.3%

1-Naphth-1-yl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one 9b



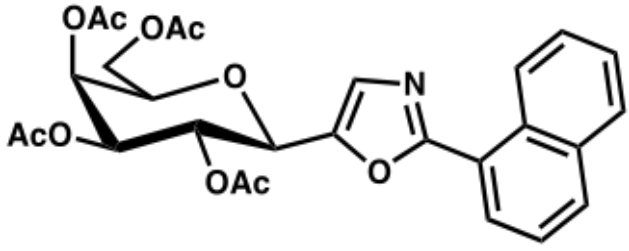
Compound **8** (150 mg, 0.421 mmol), 1-naphthoyl chloride (85 mg, 0.463 mmol), bis(triphenylphosphine) palladium(II) dichloride (15 mg, 0.021 mmol) and copper(I) iodide (12 mg, 0.063 mmol) were dissolved in dry THF (5 mL) and triethylamine (0.120 mL, 0.842 mmol) was added. The reaction mixture goes from pale yellow to a deep orange upon triethylamine addition. After 15 mins, the reaction mixture was poured into ethyl acetate (40 mL), washed with brine (40 mL), the brine was extracted twice with ethyl acetate (40 mL), the organic phases pooled, dried with sodium sulfate and evaporated. Column chromatography (2:1 heptane/ethyl acetate) gave **9b** (137 mg, 64%).
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.19 (dd, J1=8.5 Hz, J2=0.8 Hz, 1H), 8.53 (dd, *J*= 7.3 Hz, 1.3 Hz, 1H), 8.13 (d, *J*=8.2 Hz, 1H), 7.96-7.91 (m, 1H), 7.73-7.67 (m, 1H), 7.65-7.58 (m, 2H), 5.59 (t, *J*=10.1 Hz, 1H, **H^2**), 5.50 (dd, *J*=3.4 Hz, 1.0 Hz, 1H, **H^4**), 5.11 (dd, *J*=10.2 Hz, 3.3 Hz, 1H, **H^3**), 4.51 (d, *J*=10.1 Hz, 1H, **H^1**), 4.22-4.17 (m, 2H), 4.04-3.99 (m, 1H, **H^5**), 2.22 (s, 3H), 2.14 (s, 3H), 2.11 (s, 3H), 2.04 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 135.78, 135.59, 129.31, 128.66, 126.95, 125.86, 124.48, 85.04, 74.99, 71.41, 69.17, 67.77, 67.26, 61.59, 20.71, 20.62
$[\alpha]^{20}_D$= -12° (*c*=0.59553 in chloroform).
HRMS: M+H; 511.1601 found, 511.1604 calculated.

1-Naphth-2-yl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one 9c



Compound **8** (150 mg, 0.421 mmol), 2-naphthoyl chloride (88 mg, 0.463 mmol), bis(triphenylphosphine) palladium(II) dichloride (15 mg, 0.021 mmol) and copper(I) iodide (12 mg, 0.063 mmol) were dissolved in dry THF (5 mL) and triethylamine (0.120 mL, 0.842 mmol) was added. The reaction mixture goes from pale yellow to a deep orange upon triethylamine addition. After 1 hour, the reaction mixture was poured into ethyl acetate (40 mL), washed with brine (40 mL), the brine was extracted twice with ethyl acetate (40 mL), the organic phases pooled, dried with sodium sulfate and evaporated. Column chromatography (1.5:1 heptane/ethyl acetate) gave **9c** (146 mg, 68%).
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.71 (s, 1H), 8.16-8.08 (m, 2H), 7.95-7.90 (m, 2H), 7.71-7.60 (m, 2H), 5.65 (t, *J*=10.2 Hz, 1H, **H²**), 5.52 (dd, *J*=3.4 Hz, 1.0 Hz, 1H, **H⁴**), 5.13 (dd, *J*=10.2 Hz, 3.3 Hz, 1H, **H³**), 4.54 (d, *J*=9.8 Hz, 1H, **H¹**), 4.22-4.19 (m, 2H), 4.04-3.99 (m, 1H, **H⁵**), 2.23 (s, 3H), 2.15 (s, 3H), 2.11 (s, 3H), 2.05 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 176.82, 170.48, 170.22, 170.06, 169.56, 136.40, 133.59, 132.51, 129.99, 129.37, 128.69, 127.94, 127.12, 123.46, 86.09, 83.64, 75.07, 71.41, 69.13, 67.79, 67.26, 61.60, 20.79, 20.75, 20.72, 20.62
$[\alpha]^{20}_{D}$= -7° (*c*=0.67860 in chloroform).
HRMS: M+H; 511.1612 found, 511.1604 calculated.

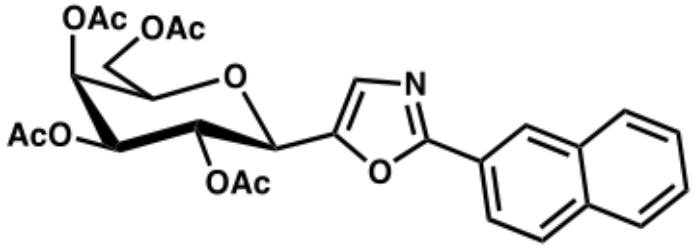
2-Naphth-1-yl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10b



Compound **8** (100 mg, 0.281 mmol), 8-methylquinoline N-oxide (67 mg, 0.421 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (22 mg, 0.028 mmol) and 1-cyanonaphthalene (150 mg, 0.980 mmol) were mixed, and heated to 75°C where the mixture melted. The reaction was left under nitrogen for 48 hours, then diluted with ethyl acetate (20 mL) and washed with brine (20 mL). The brine was extracted two times with ethyl acetate (20 mL), the organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1.5:1 heptane/ethyl acetate) gave **10b** (49 mg, 33%).

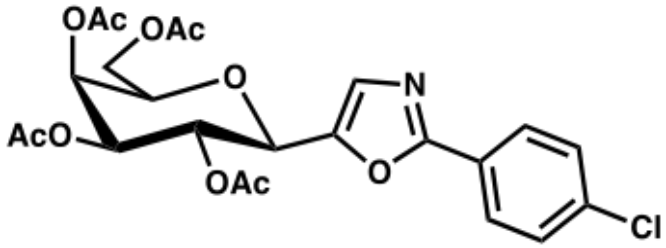
^{1}H NMR (400 MHz, $CDCl_3$): δ 9.23 (d, *J*=8.7 Hz, 1H), 8.25 (dd, *J*=7.3 Hz, 1.2 Hz, 1H), 8.00 (d, *J*=8.3 Hz, 1H), 7.94 (d, *J*=7.8, 1H), 7.70-7.65 (m, 1H), 7.62-7.56 (m, 2H), 7.41 (s, 1H, oxazole CH), 5.77 (t, *J*=10.1 Hz, 1H, **H²**), 5.57 (dd, *J*=3.5 Hz, 0.9 Hz, 1H, **H⁴**), 5.24 (dd, *J*=10.4 Hz, 3.4 Hz, 1H, **H³**), 4.73 (d, *J*=10.1 Hz, 1H, **H¹**), 4.23-4.12 (m, 3H), 2.26 (s, 3H), 2.09 (s, 3H), 2.06 (s, 3H), 1.96 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 134.16, 134.01, 131.65, 131.19, 129.13, 129, 02, 128.59, 128.41, 127.89, 127.67, 126.38, 126.00, 124.99, 74.77, 72.23 , 72.07, 67.46 , 66.94, 61.64, 20.80, 20.75, 20.63
$[\alpha]^{20}_{D}$= -3° (*c*=0.30249 in chloroform).
HRMS: M+H; 526.1719 found, 526.1713 calculated

2-Naphth-2-yl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10c



Compound **8** (100 mg, 0.281 mmol), 8-methylquinoline N-oxide (67 mg, 0.421 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (22 mg, 0.028 mmol) and 2-cyanonaphthalene (150 mg, 0.980 mmol) were mixed, and heated to 75°C where the mixture melted. The reaction was left under nitrogen for 48 hours, then diluted with ethyl acetate (25 mL) and washed with brine (40 mL). The brine was extracted two times with ethyl acetate (20 mL), the organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1.5:1 heptane/ethyl acetate) gave **10c** (35 mg, 25%).
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.59 (d, *J*=1.3 Hz, 1H), 8.15 (dd, *J*=8.7 Hz, 1.6 Hz, 1H), 8.00-7.87 (m, 3H), 7.59-7.55 (m, 2H), 7.32 (s, 1H, oxazole CH), 5.73 (t, *J*=10.1 Hz, 1H, **H²**), 5.57 (dd, *J*=3.5 Hz, 0.9 Hz, 1H, **H⁴**), 5.22 (dd, *J*=10.4 Hz, 3.4 Hz, 1H, **H³**), 4.71 (d, *J*=10.1 Hz, 1H, **H¹**), 4.23-4.11 (m, 3H), 2.28 (s, 3H), 2.09 (s, 3H), 2.05 (s, 3H), 1.95 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 170.47, 170.37, 170.17, 169.16, 146.61, 128.82, 128.71, 128.19, 127.89, 127.47, 126.82, 126.76, 123.35, 74.74, 72.25, 72.09, 67.43, 66.85, 61.59, 20.82, 20.75, 20.62
$[\alpha]^{20}_{D}$= -8° (*c*=0.20941 in chloroform).
HRMS: M+H; 526.1712 found, 526.1713 calculated.

2-(4-Chlorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10d



Compound **8** (50 mg, 0.140 mmol), 8-methylquinoline N-oxide (49 mg, 0.182 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (11 mg, 0.007 mmol) and of 4-chlorobenzonitrile (116 mg, 0.840 mmol) was sealed in a tube under nitrogen, heated to 75°C under nitrogen, and left for 3 days. The reaction was diluted with ethyl acetate (20 mL), poured into brine (20 mL) and extracted two times with ethyl acetate (20 mL). The organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1:1 heptane/ethyl acetate) gave yellow powdered **10d** (9 mg, 19%).

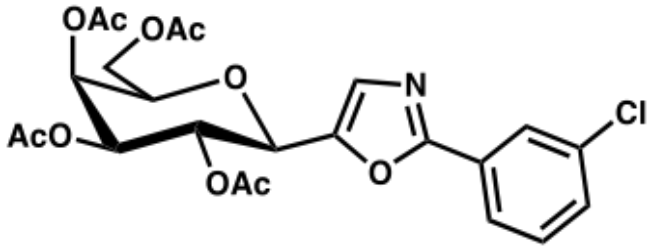
^{1}H NMR (400 MHz, $CDCl_3$): δ 8.04-7.98 (m, 2H), 7.49-7.44 (m, 2H), 7.28 (s, 1H, oxazole CH), 5.67 (t, *J*=10.1 Hz, 1H, **H²**). 5.55 (dd, *J*=3.5 Hz, 1.0 Hz, 1H, **H⁴**), 5.19 (dd, *J*=10.1 Hz, 3.4 Hz, 1H, **H³**), 4.64 (d, *J*=10.0 Hz, 1H, **H¹**), 4.21-4.08 (m, 3H), 2.25 (s, 3H), 2.08 (s, 3H), 2.03 (s, 3H), 1.93 (s, 3H)

^{13}C NMR (100 MHz, $CDCl_3$): δ 170.45, 170.31, 170.13, 169.12, 161.76, 146.63, 136.93, 129.16, 128.22, 127.91, 125.56, 74.74, 72.11, 71.99, 67.38, 66.77, 61.56, 20.79, 20.73, 20.62, 20.59

HRMS: M+H; 510.1167 found, 510.1167 calculated.

$[\alpha]^{20}_{D}$= -11° (*c*=0.23056 in chloroform).

2-(3-Chlorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10e

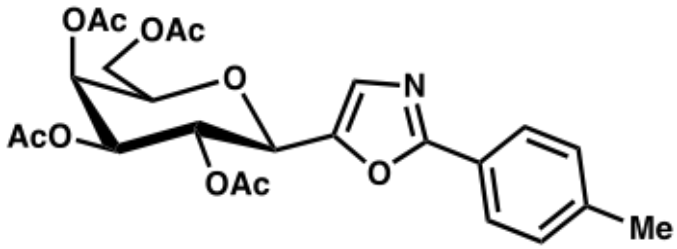


Compound **8** (50 mg, 0.140 mmol), 8-methylquinoline N-oxide (49 mg, 0.182 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (11 mg, 0.007 mmol) and 3-chlorobenzonitrile (116 mg, 0.840 mmol) were sealed in a tube under nitrogen, heated to 50°C under nitrogen, and left for 3 days. The reaction was diluted with ethyl acetate (20 mL), poured into brine (20 mL) and extracted two times with ethyl acetate (20 mL). The organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1:1 heptane/ethyl acetate) gave yellow powdered **10e** (8 mg, 11%).

^{1}H NMR (400 MHz, $CDCl_3$): δ 8.07 (t, *J*=1.7 Hz, 1H), 7.96 (dt, J1=7.3 Hz, 1.7 Hz, 1H), 7.48-7.40 (m, 2H), 7.27 (s, 1H, oxazole CH), 5.67 (t, *J*=10.0 Hz, 1H, **H²**). 5.55

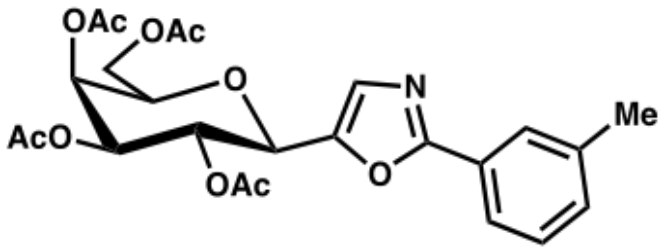
(dd, *J*=3.6 Hz, 1.2 Hz, 1H, **H⁴**), 5.20 (dd, *J*=10.0 Hz, 3.6 Hz, 1H, **H³**), 4.65 (d, *J*=10.0 Hz, 1H, **H¹**), 4.21-4.09 (m, 3H), 2.26 (s, 3H), 2.09 (s, 3H), 2.04 (s, 3H), 1.94 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 170.45, 170.32, 170.12, 169.11, 134.94, 130.76, 130.17, 128.69, 128.19, 126.66, 124.70, 74.78, 72.14, 71.97, 67.38, 66.82, 61.57, 20.80, 20.73, 20.62, 20.58
HRMS: M+H; 510.1177 found, 510.1167 calculated.
$[\alpha]^{20}_D$= -8° (*c*=0.27875 in chloroform)..

2-(4-Methylphenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10f



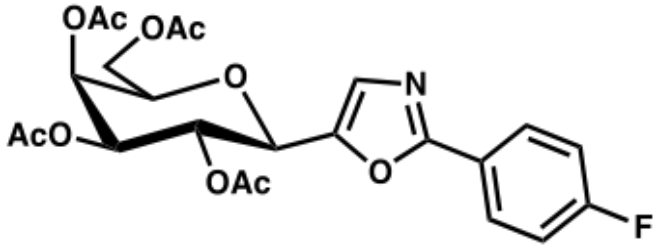
Compound **8** (50 mg, 0.140 mmol), 8-methylquinoline N-oxide (49 mg, 0.182 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (11 mg, 0.007 mmol) and p-tolunitrile (99 mg, 0.840 mmol) were sealed in a tube under nitrogen, heated to 75°C under nitrogen, and left for 3 days. The reaction was diluted with ethyl acetate (20 mL), poured into brine (20 mL) and extracted two times with ethyl acetate (20 mL). The organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1:1 heptane/ethyl acetate) gave yellow powdered **10f** (3 mg, 4%).
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.98-7.94 (m, 2H), 7.31-7.27 (m, 3H), 7.79-7.74 (m, 1H), 5.68 (t, *J*=10.1 Hz, 1H, **H²**), 5.54 (dd, *J*=3.4 Hz, 1.0 Hz, 1H, **H⁴**), 5.19 (dd, *J*=10.2 Hz, 3.8 Hz, 1H, **H³**), 4.65 (d, *J*=9.6 Hz, 1H, **H¹**), 4.23-4.08 (m, 3H), 2.43, (s, 3H, phenyl methyl H), 2.25 (s, 3H), 2.08 (s, 3H), 2.04 (s, 3H), 1.94 (s, 3H)
^{13}C NMR (100 MHz, $CClD_3$): δ 170.47, 170.36, 170.17, 169.10, 141.13, 130.20, 129.52, 129.20, 127.92, 126.58, 124.37, 118.10, 74.67, 72.20, 72.08, 67.43, 66.81, 61.59, 21.57, 20.80, 20.74, 20.63, 20.60
HRMS: M+H; 490.1707 found, 490.1713 calculated.
$[\alpha]^{20}_D$= -13° (*c*=0.18849 in chloroform).

2-(3-Methylphenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10g



Compound **8** (50 mg, 0.140 mmol), 8-methylquinoline N-oxide (49 mg, 0.182 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (11 mg, 0.007 mmol) and m-tolunitrile (99 mg, 0.840 mmol) were sealed in a tube under nitrogen, heated to 75°C under nitrogen, and left for 3 days. The reaction was diluted with ethyl acetate (20 mL), poured into brine (20 mL) and extracted two times with ethyl acetate (20 mL). The organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1:1 heptane/ethyl acetate) gave yellow powdered **10g** (22 mg, 48%).
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.94-7.84 (m ,2H), 7.37 (t, *J*= 7.6 Hz, 1H), 7.31-7.23 (m, 2H), 5.67 (t, *J*= 10.2 Hz, 1H, **H²**), 5.54 (dd, *J*=3.5 Hz, 0.9 Hz, 1H, **H⁴**), 5.19 (dd, *J*=9.9 Hz, 3.4 Hz, 1H, **H³**), 4.66 (d, *J*=10.2 Hz, 1H, **H¹**), 4.22-4.08 (m, 3H), 2.44, (s, 3H, phenyl methyl H), 2.25 (s, 3H), 2.08 (s, 3H), 2.03 (s, 3H), 1.93 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 170.46, 170.35, 170.16, 169.11, 146.30, 138.60, 131.58, 128.73, 127.93, 127.17, 126.94, 123.76, 74.69, 72.21, 72.07, 67.42, 66.84, 61.58, 21.36, 20.80, 20.74, 20.63, 20.59
HRMS: M+H; 490.1707 found, 490.1713 calculated
$[\alpha]^{20}_{D}$= -6° (*c*=0.55960 in chloroform).

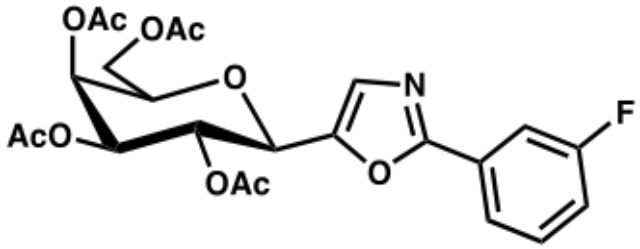
2-(4-Fluorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10h



Compound **8** (50 mg, 0.140 mmol), 8-methylquinoline N-oxide (49 mg, 0.182 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (11 mg, 0.007 mmol) and 4-fluorobenzonitrile (102 mg, 0.840 mmol) were sealed in a tube under nitrogen, heated to 75°C under nitrogen, and left for 3 days. The reaction was diluted with ethyl acetate (20 mL), poured into brine (20 mL) and extracted two times with ethyl acetate (20 mL). The organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1:1 heptane/ethyl acetate) gave yellow powdered **10h** (8 mg, 11%).

^{1}H NMR (400 MHz, $CDCl_3$): δ 8.10-8.04 (m, 2H), 7.24 (s, 1H, oxazole CH), 7.21-7.14 (m, 2H), 5.67 (t, *J*=10.8 Hz, 1H, **H²**), 5.55 (dd, *J*=3.5 Hz, 1.0 Hz, 1H, **H⁴**), 5.19 (dd, *J*=9.8 Hz, 3.4 Hz, 1H, **H³**), 4.64 (d, *J*=10.8 Hz, 1H, **H¹**), 4.21-4.06 (m, 3H), 2.25 (s, 3H), 2.08 (s, 3H), 2.04 (s, 3H), 1.94 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 170.45, 170.31, 170.14, 169.12, 146.42, 128.86, 128.77, 128.14, 116.15, 115.93, 74.72, 72.13, 72.01, 67.39, 66.77, 61.56, 20.78, 20.74, 20.62, 20.59
HRMS: M+H; 494.1463 found, 494.1462 calculated.
$[\alpha]^{20}_{D}$= -6° (*c*=0.20000 in chloroform).

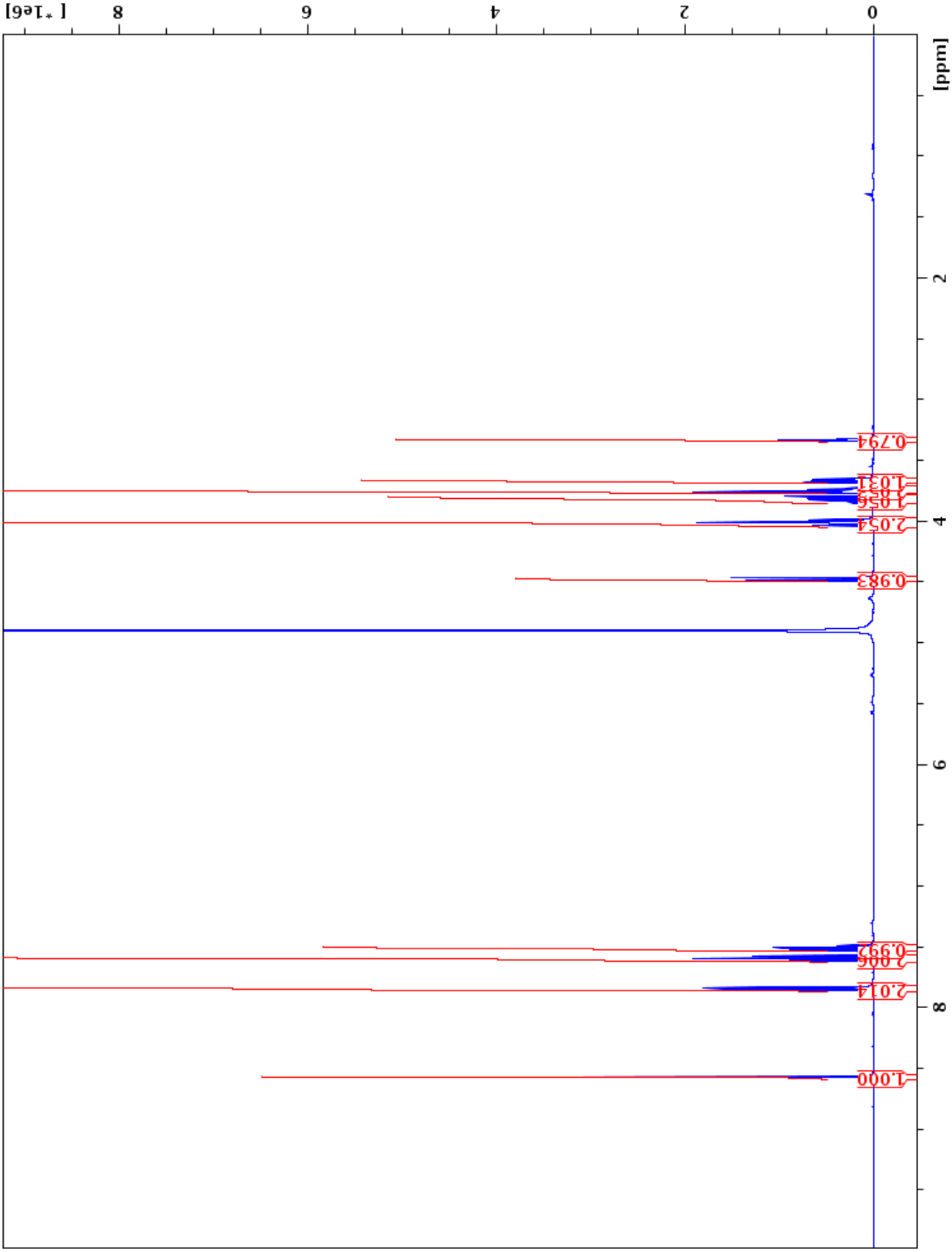
2-(3-Fluorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole 10i



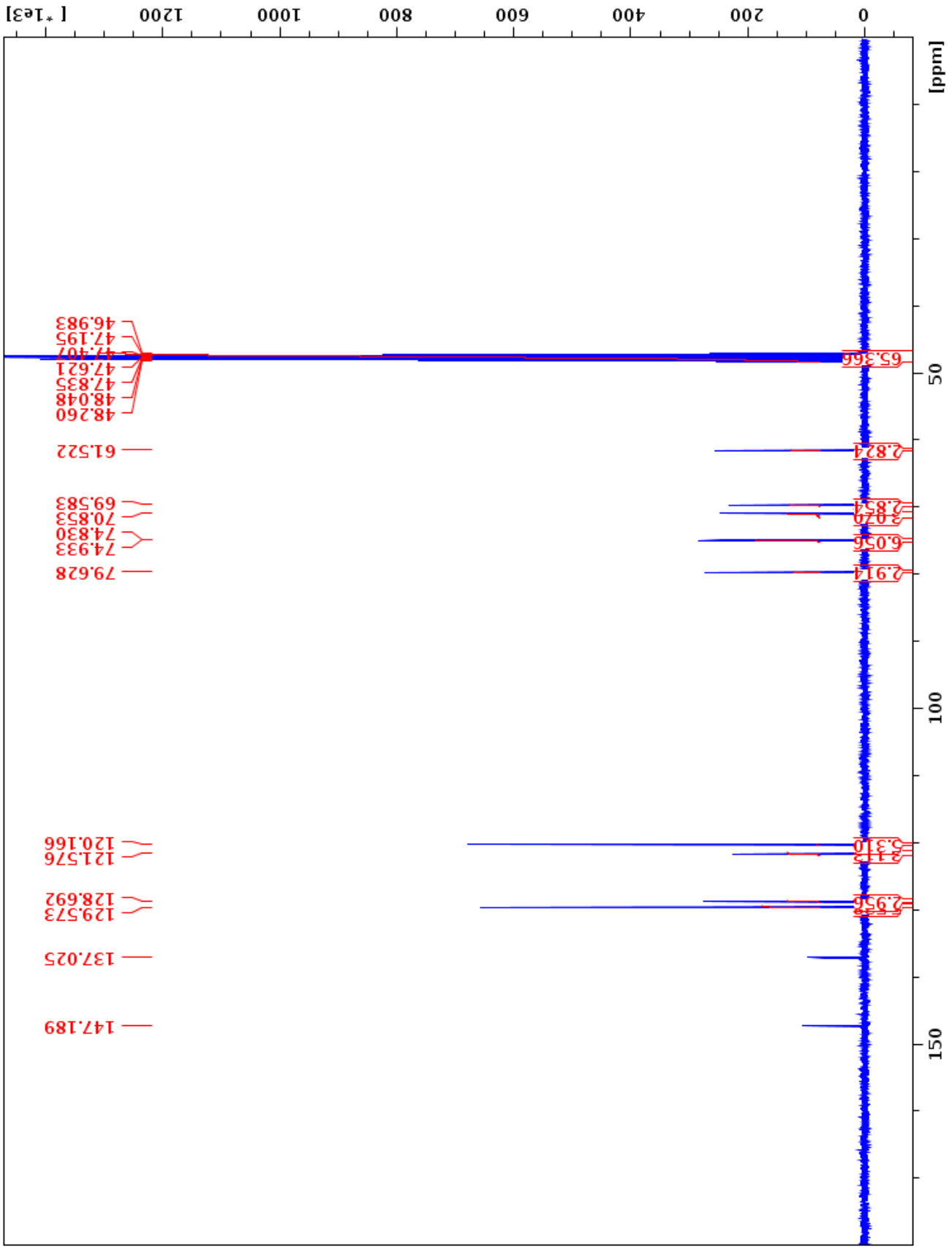
Compound **8** (50 mg, 0.140 mmol), 8-methylquinoline N-oxide (49 mg, 0.182 mmol), [bis(trifluoromethanesulfonyl)imidate](triphenylphosphine)gold(I) 2:1 toluene adduct (11 mg, 0.007 mmol) and 3-fluorobenzonitrile (101 mg, 0.840 mmol) were sealed in a tube under nitrogen, heated to 75°C under nitrogen, and left for 3 days. The reaction was diluted with ethyl acetate (20 mL), poured into brine (20 mL) and extracted two times with ethyl acetate (20 mL). The organic phases were pooled, dried with anhydrous sodium sulfate and evaporated. Column chromatography (1:1 heptane/ethyl acetate) gave **10i** (14 mg, 31%) as a yellow viscous oil.
^{1}H NMR (400 MHz, $CDCl_3$): δ 7.86 (d, *J*= 7.8 Hz, 1H), 7.79-7.74 (m, 1H), 7.50-7.42 (m, 1H), 7.28 (s, 1H, oxazole CH), 7.22-7.15 (m, 1H), 5.66 (t, *J*=9.9 Hz, 1H, **H²**), 5.55 (dd, *J*=3.5 Hz, 1.0 Hz, 1H, **H⁴**), 5.19 (dd, *J*=10.2 Hz, 3.2 Hz, 1H, **H³**), 4.65 (d, *J*=10.2 Hz, 1H, **H¹**), 4.24-4.09 (m, 3H), 2.25 (s, 3H), 2.08 (s, 3H), 2.04 (s, 3H), 1.94 (s, 3H)
^{13}C NMR (100 MHz, $CDCl_3$): δ 170.46, 170.33, 170.14, 169.12, 161.65, 130.62, 130.54, 129.02, 128.17, 122.32, 117.87, 117.66, 113.75, 113.50, 74.76, 72.10, 71.97, 67.39, 66.81, 61.56, 20.79, 20.73, 20.62, 20.59
HRMS: M+H; 494.1470 found, 494.1482 calculated.
$[\alpha]^{20}_{D}$= -4° (*c*=0.41667 in chloroform).

NMR spectra

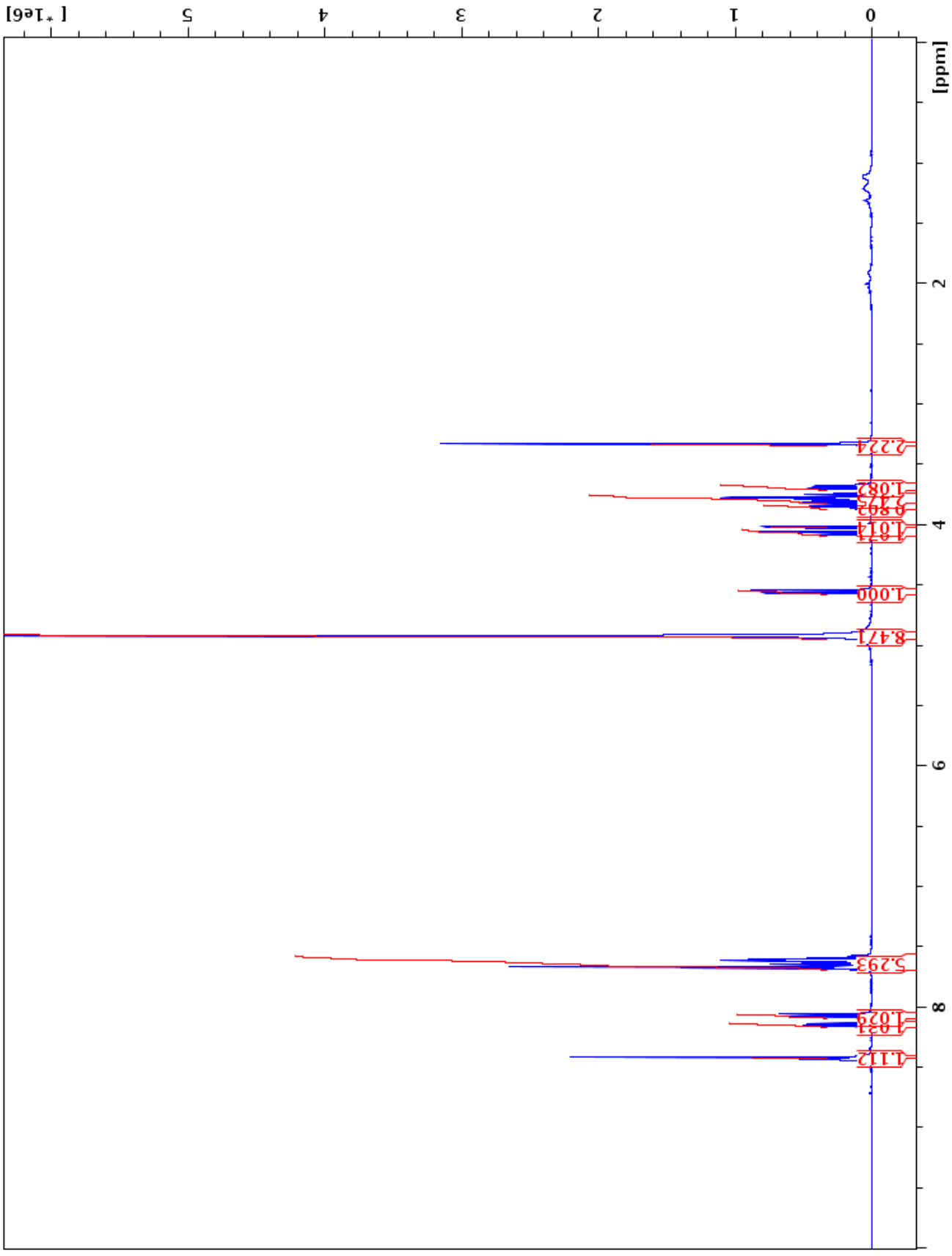
1a: 1-phenyl-4-(1-deoxy-β-D-galactopyranosyl)triazole



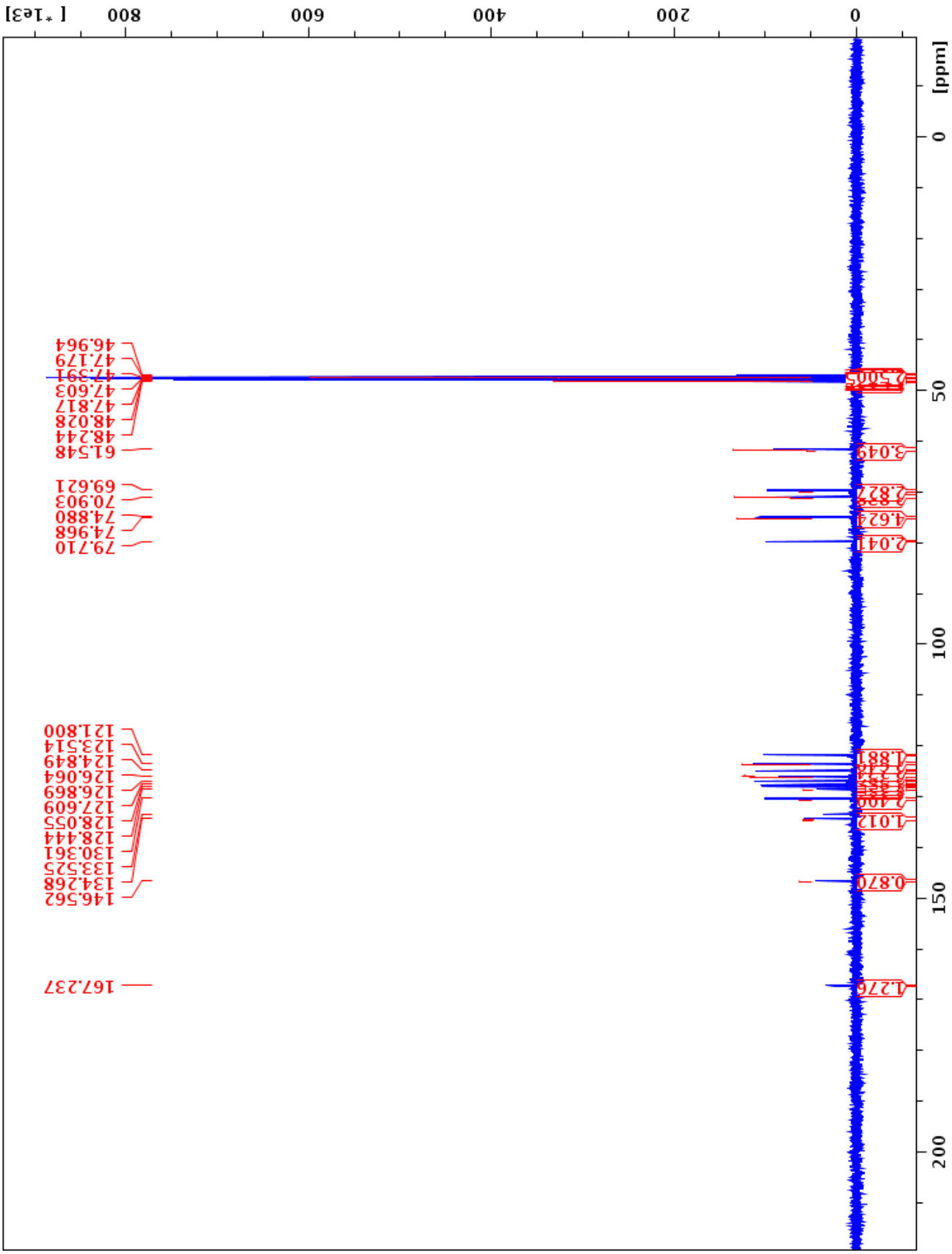
1a: 1-phenyl-4-(1-deoxy-β-D-galactopyranosyl)triazole



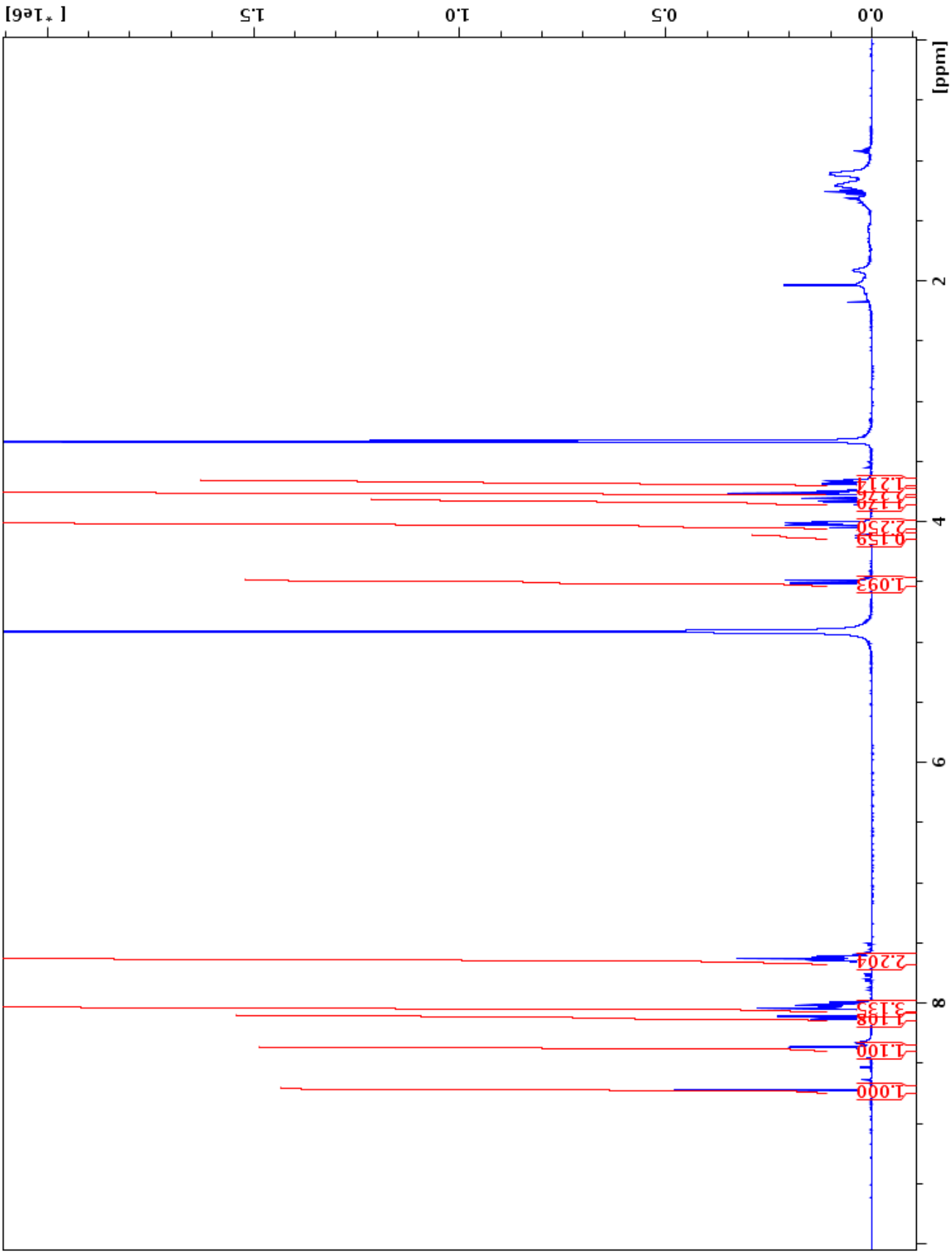
1b: 1-naphth-1-yl-4-(1-deoxy-β-D-galactopyranosyl)oxazole



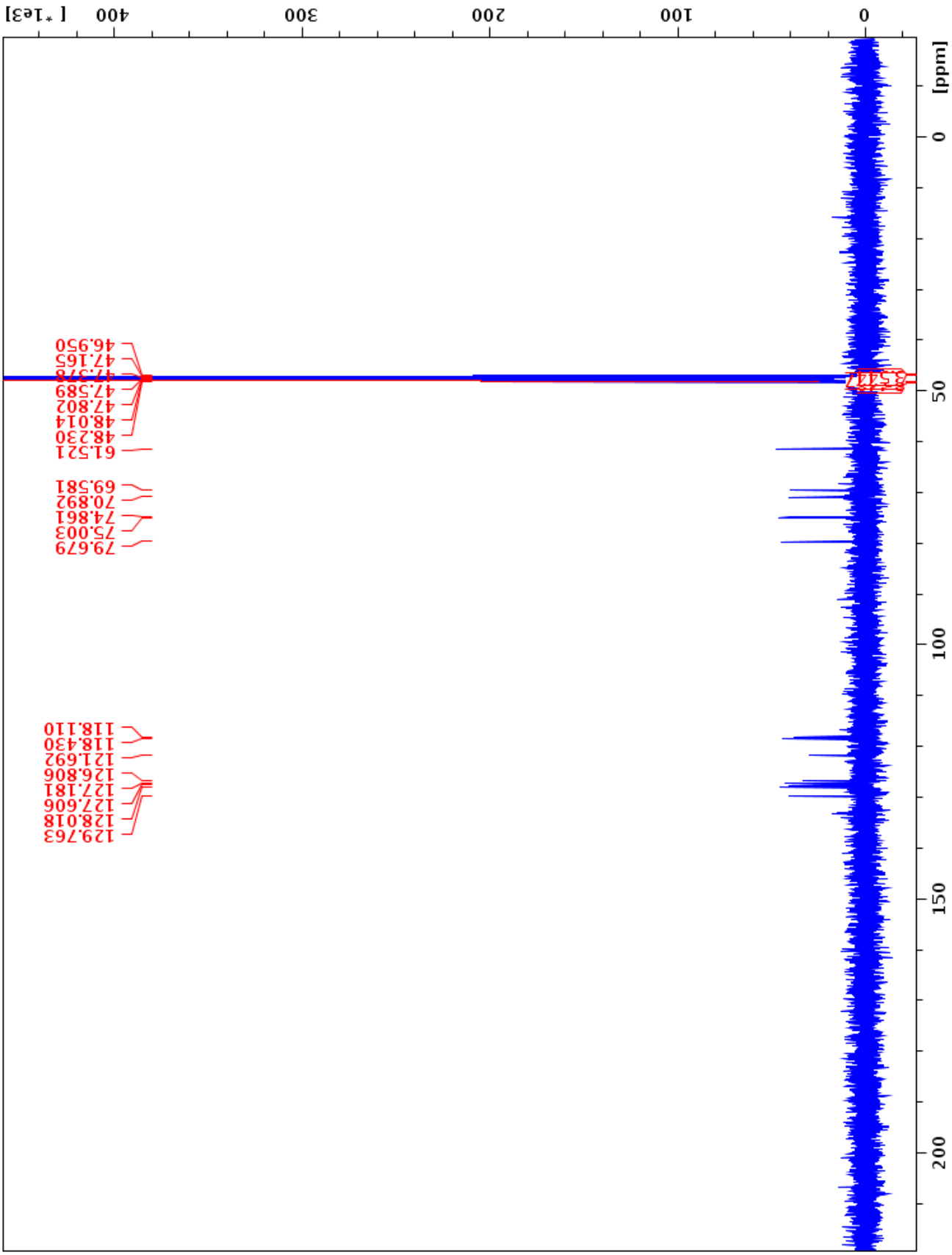
1b: 1-naphth-1-yl-4-(1-deoxy-β-D-galactopyranosyl)triazole



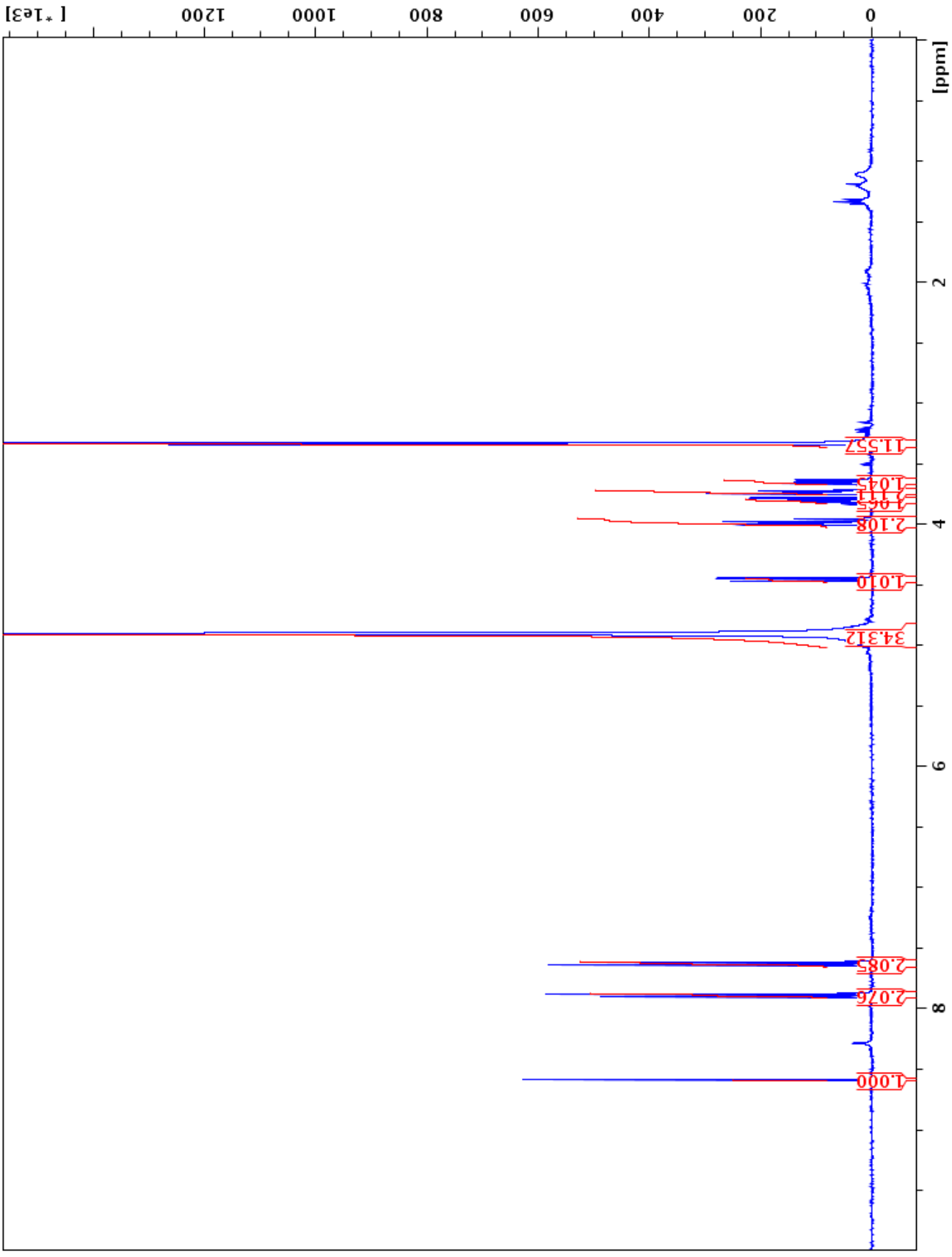
1c: 1-naphth-2-yl-4-(1-deoxy-β-D-galactopyranosyl)triazole



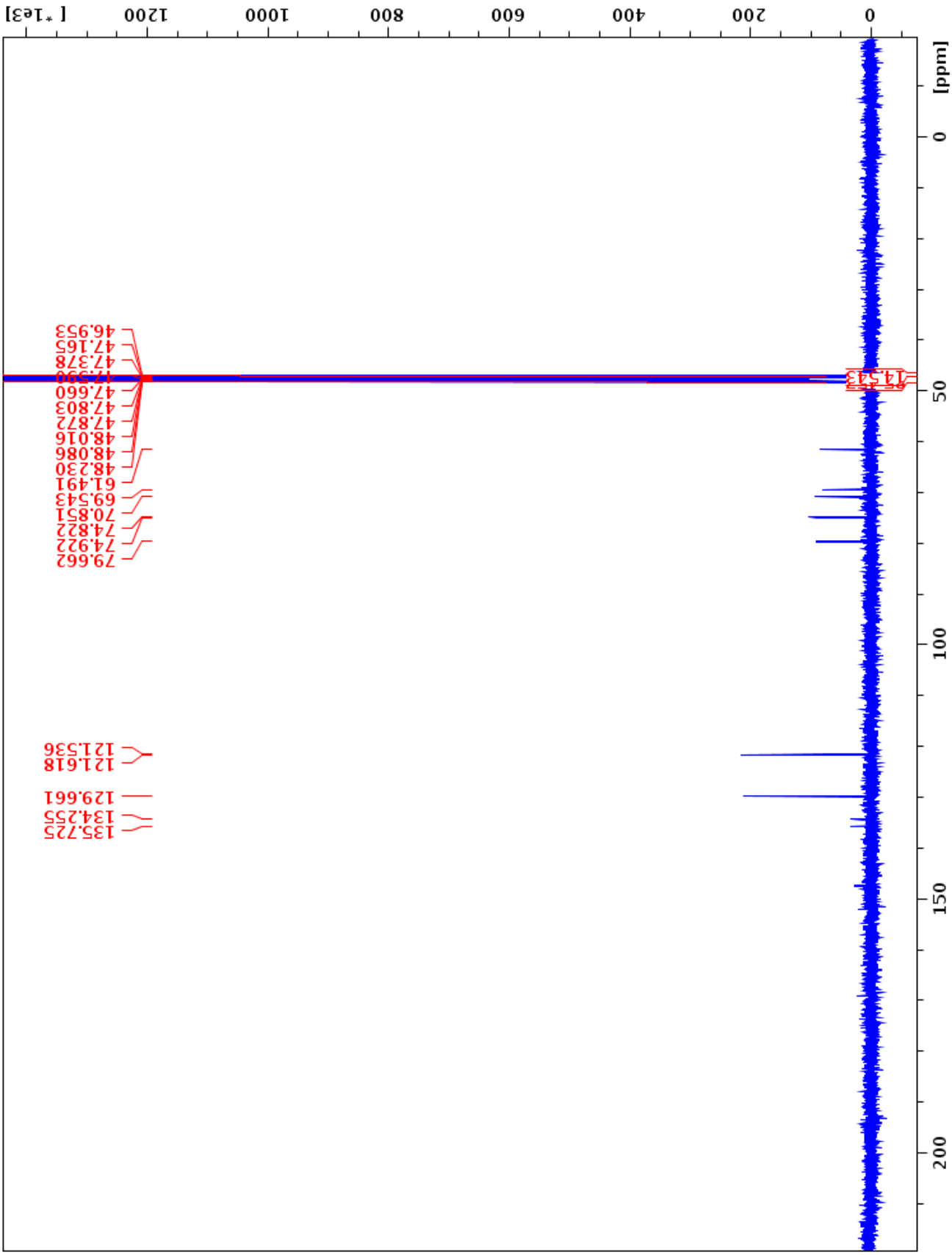
1c: 1-(naphth-2-yl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



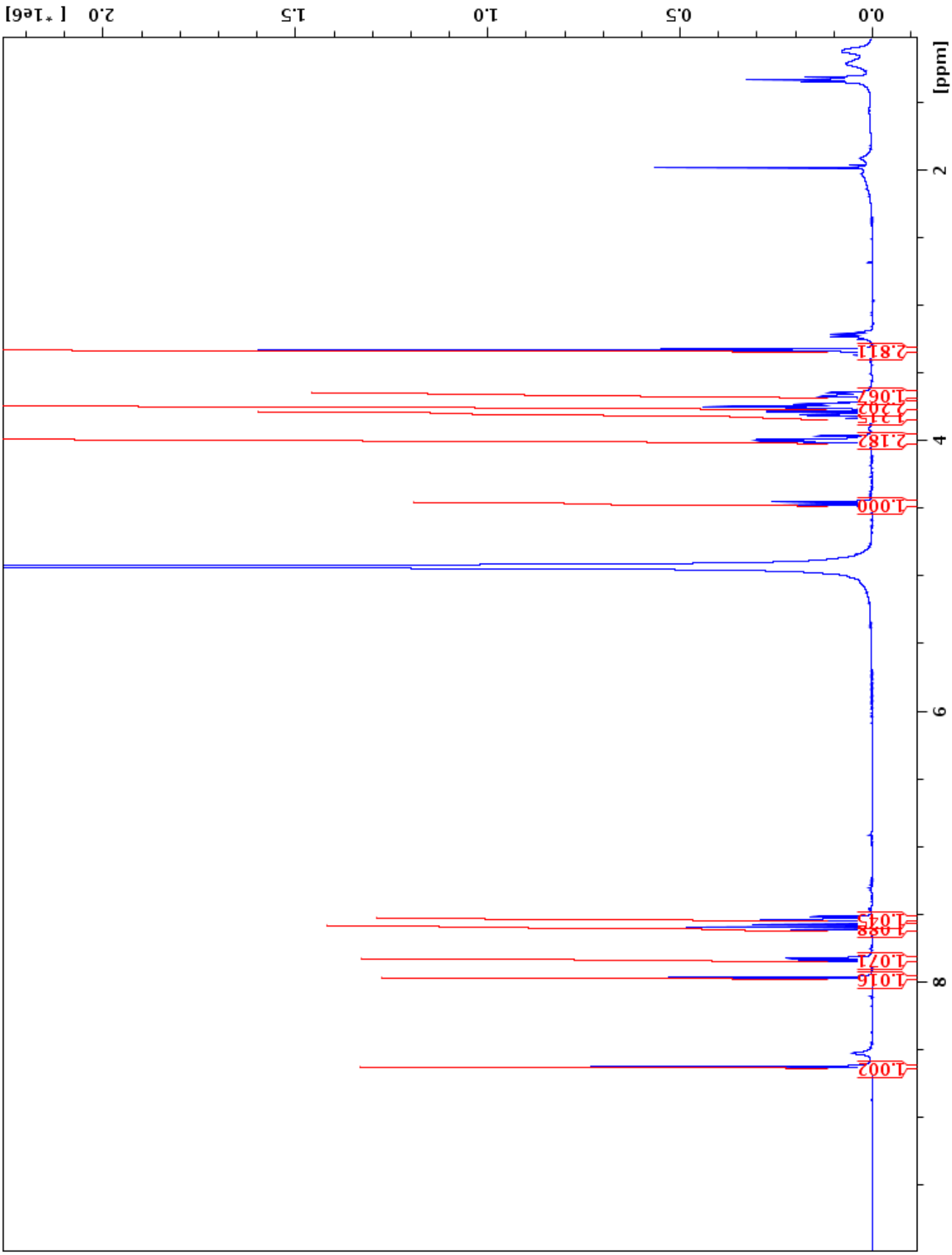
1d: 1-(4-chlorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



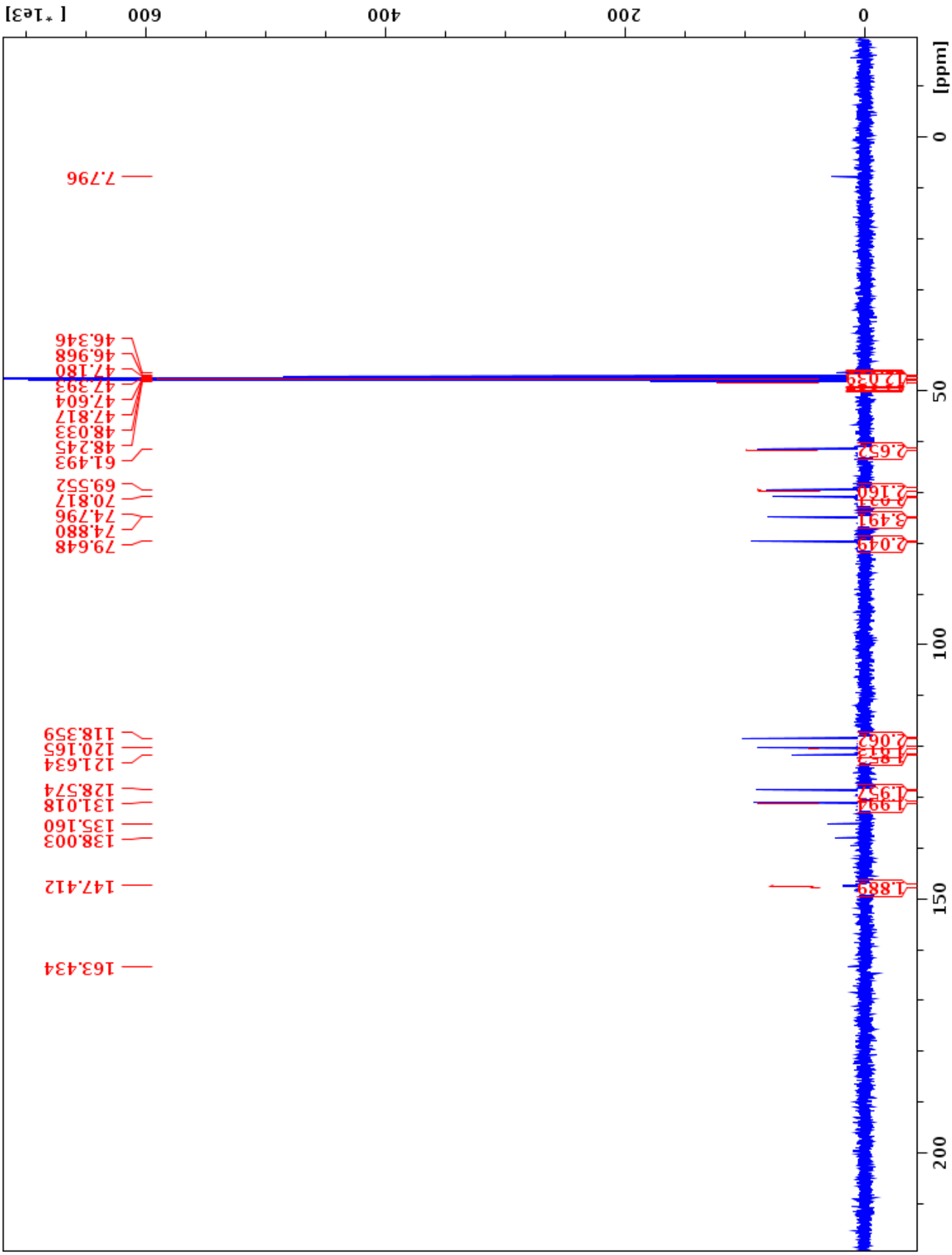
1d: 1-(4-chlorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



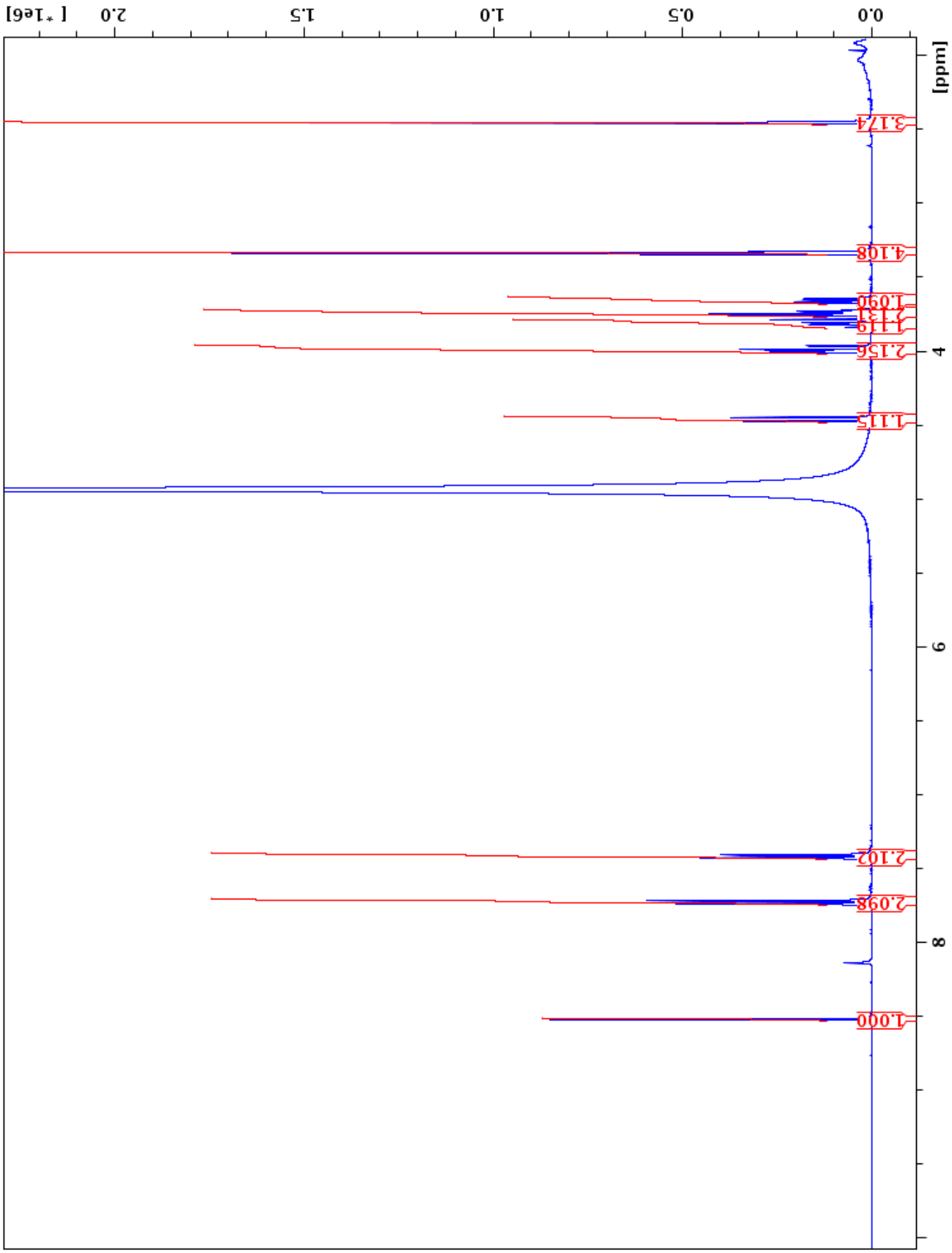
1e: 1-(3-chlorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



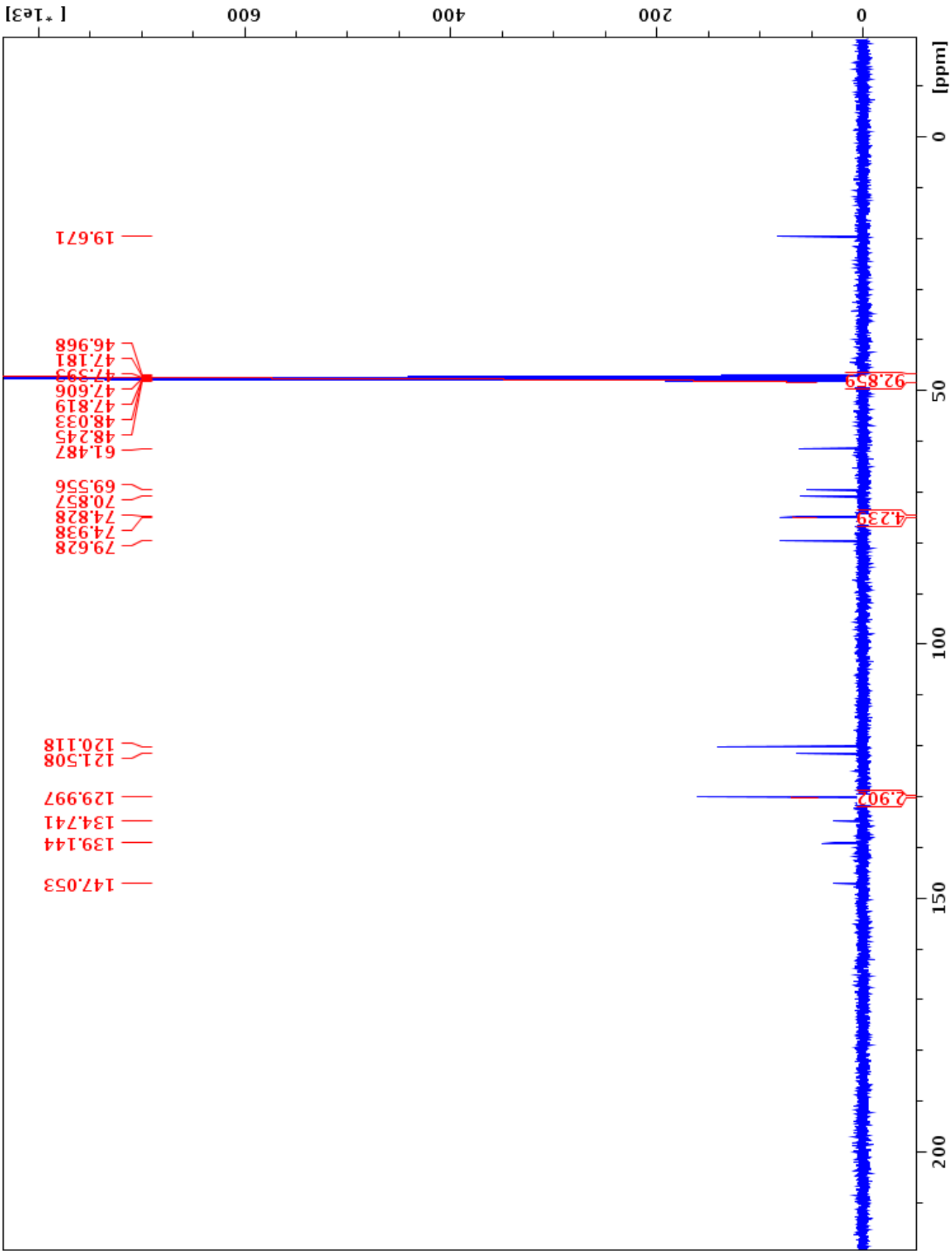
1e: 1-(3-chlorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



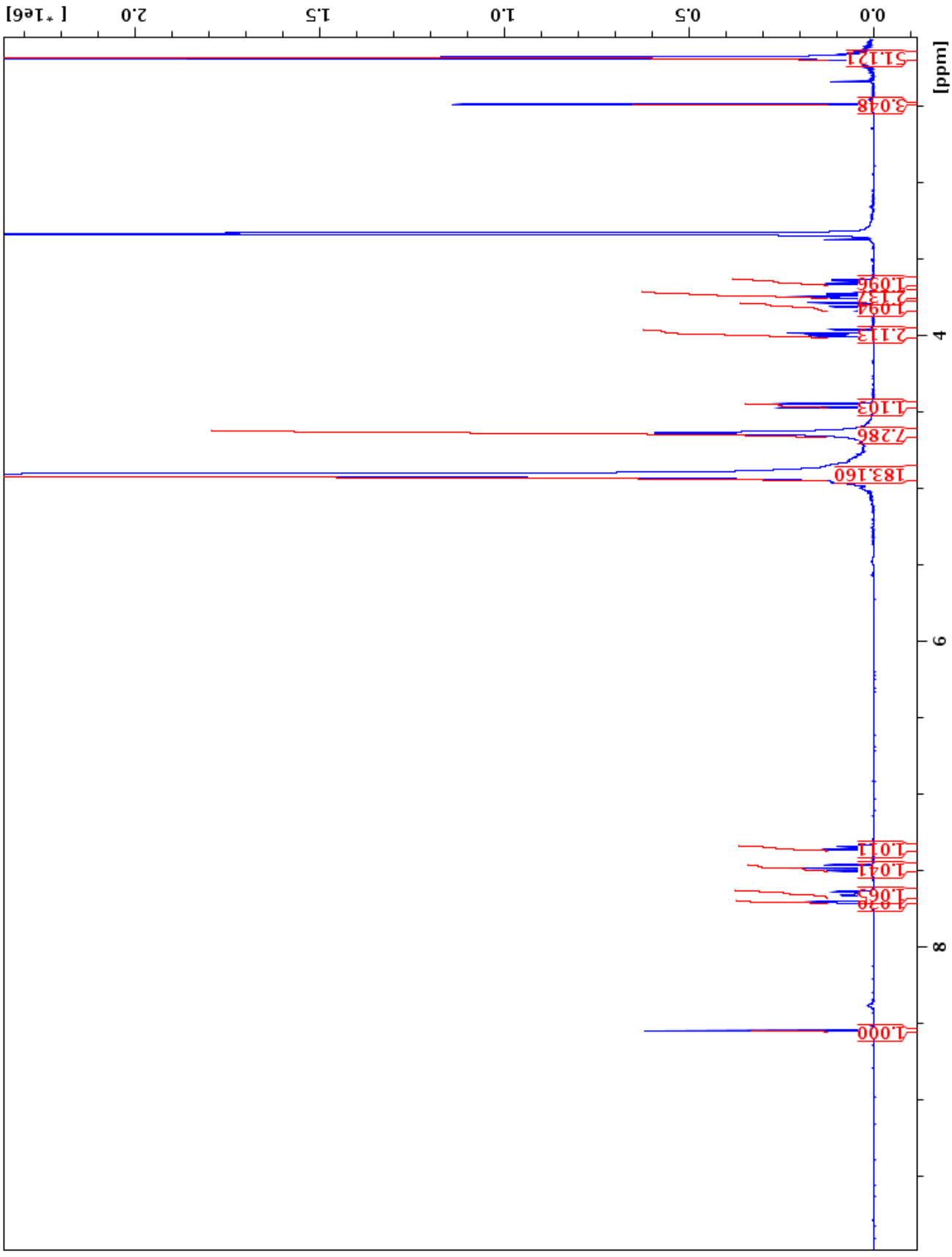
1f: 1-(4-methylphenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



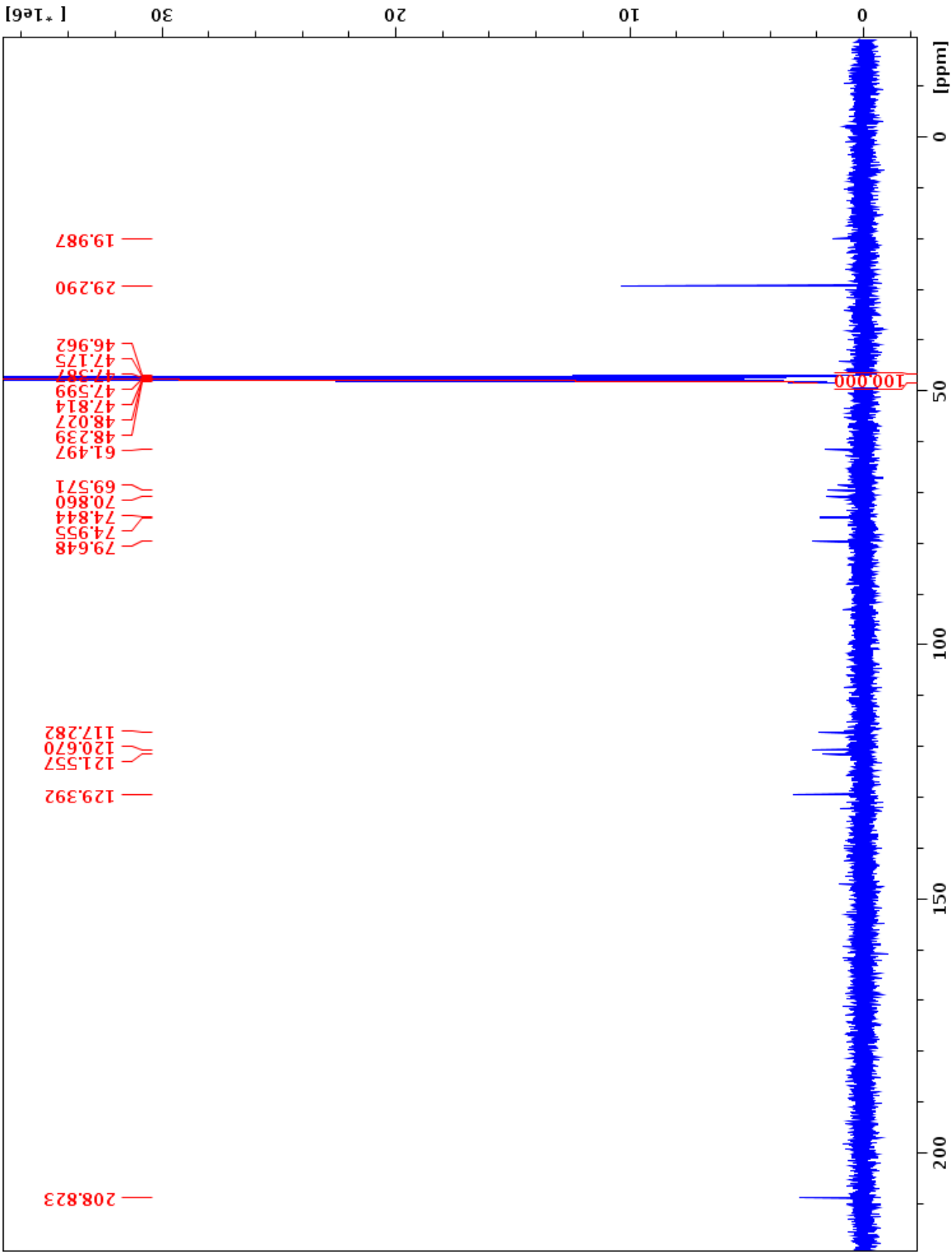
1f: 1-(4-methylphenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



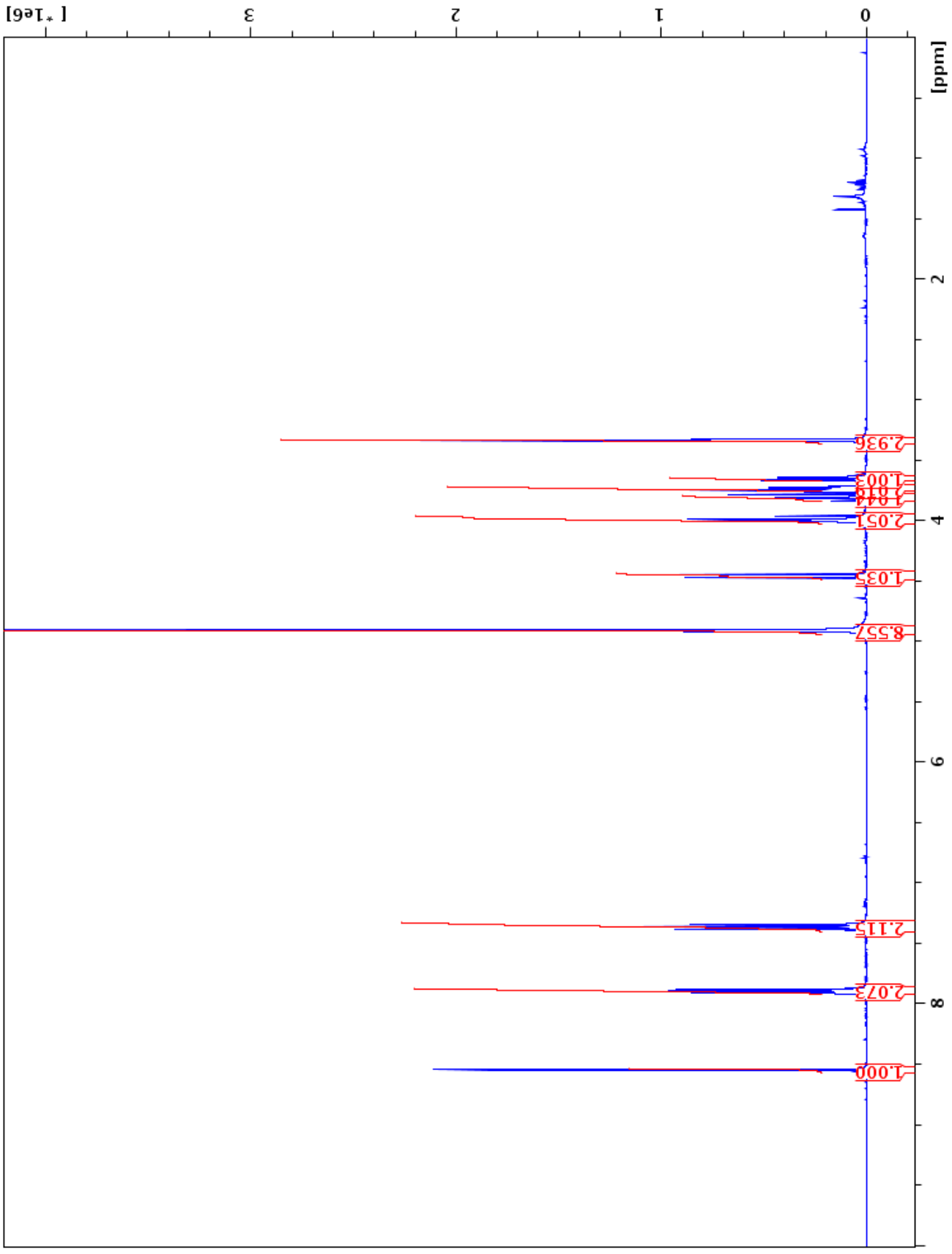
1g: 1-(3-methylphenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



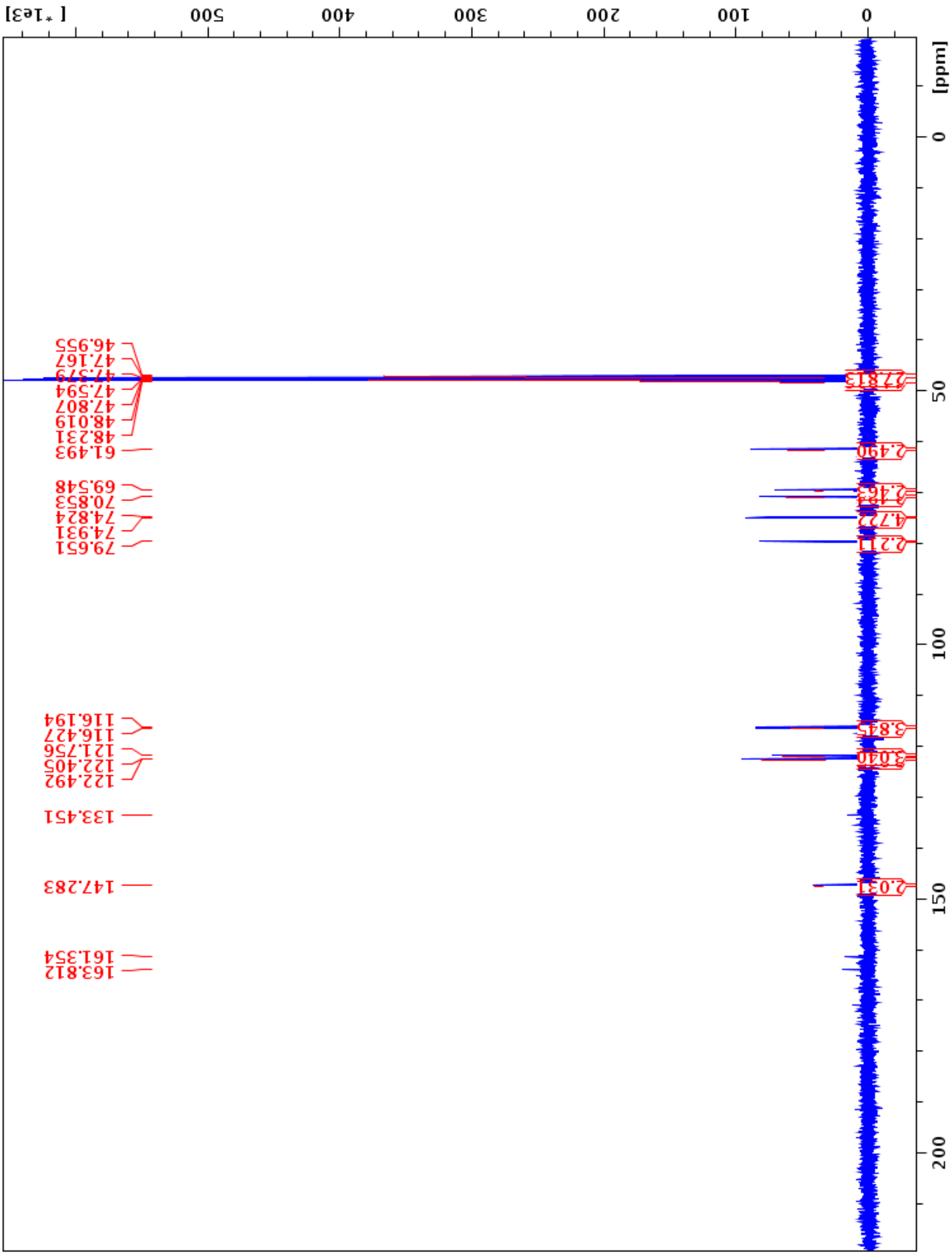
1g: 1-(3-methylphenyl)-4-(1-deoxy-β-D-galactopyranosyl)oxazole



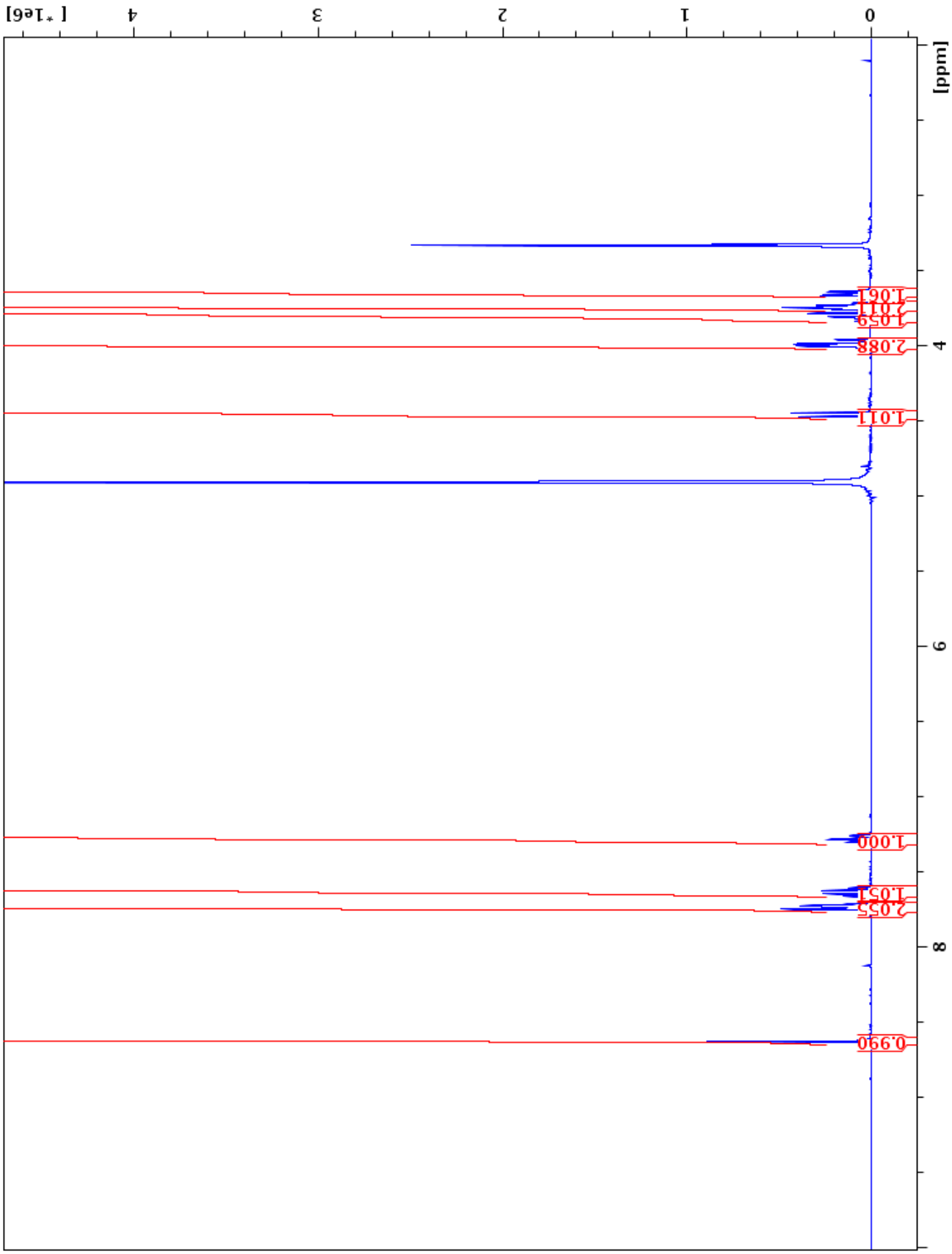
1h: 1-(4-fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



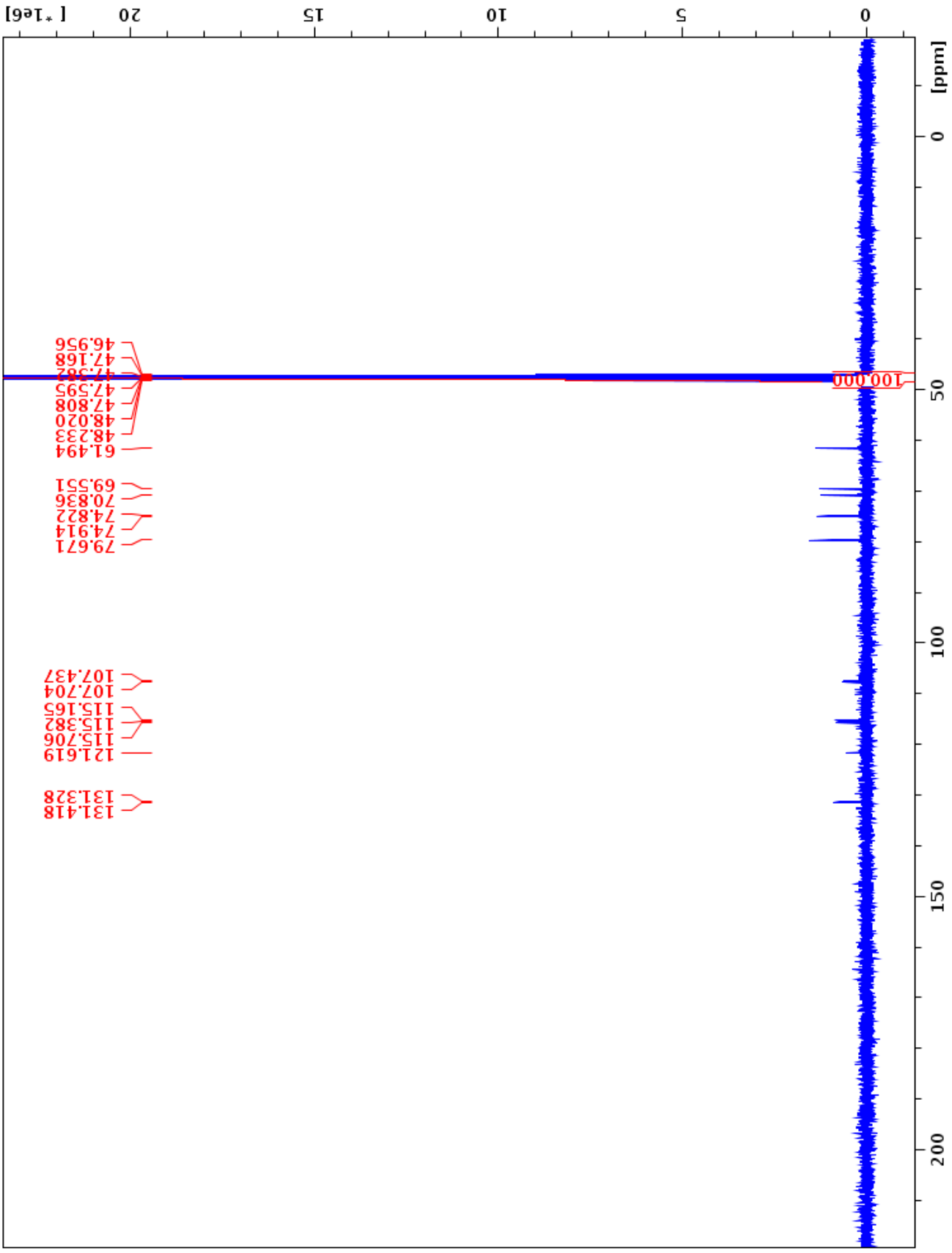
1h: 1-(4-fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



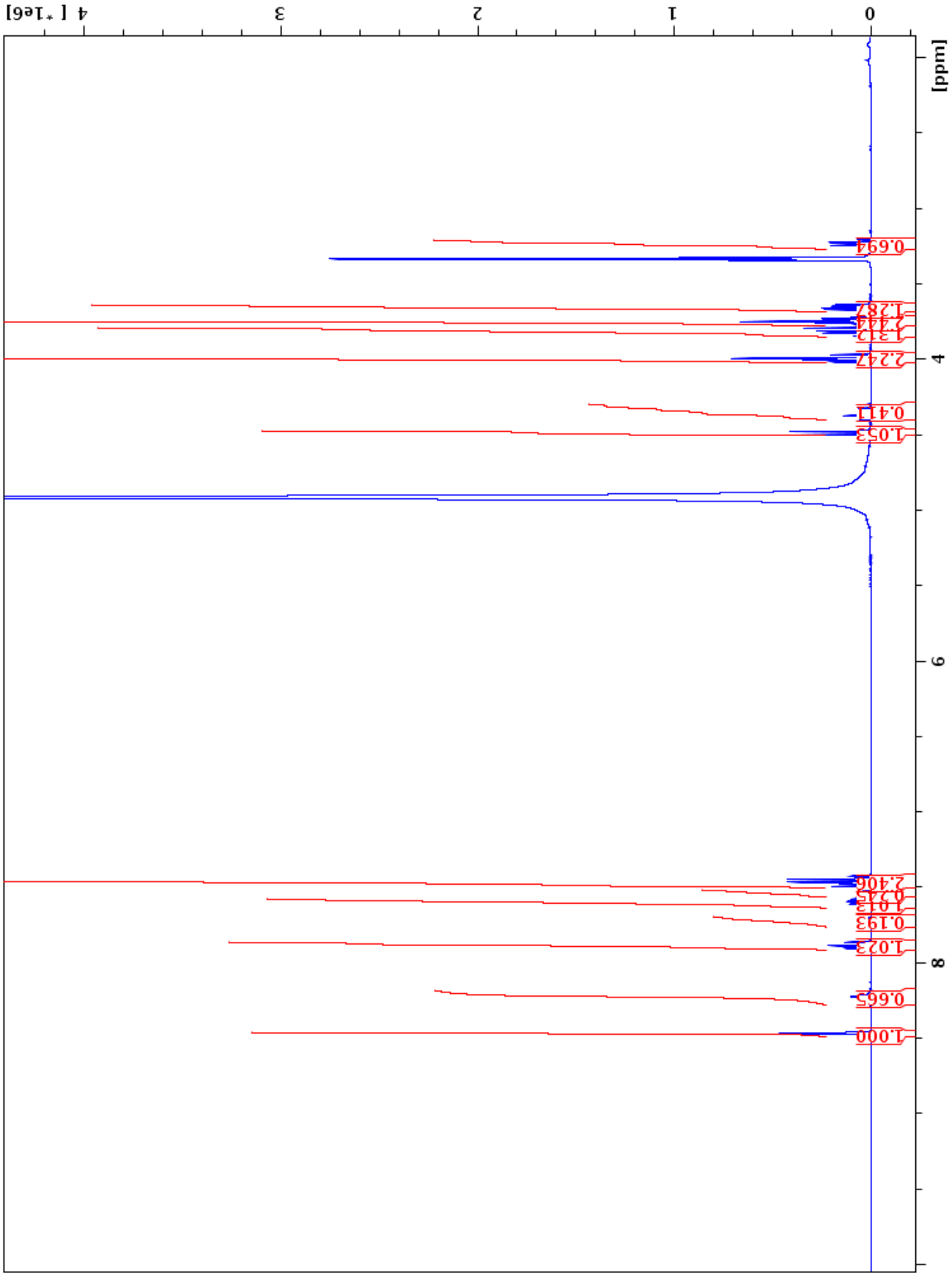
1i: 1-(3-fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



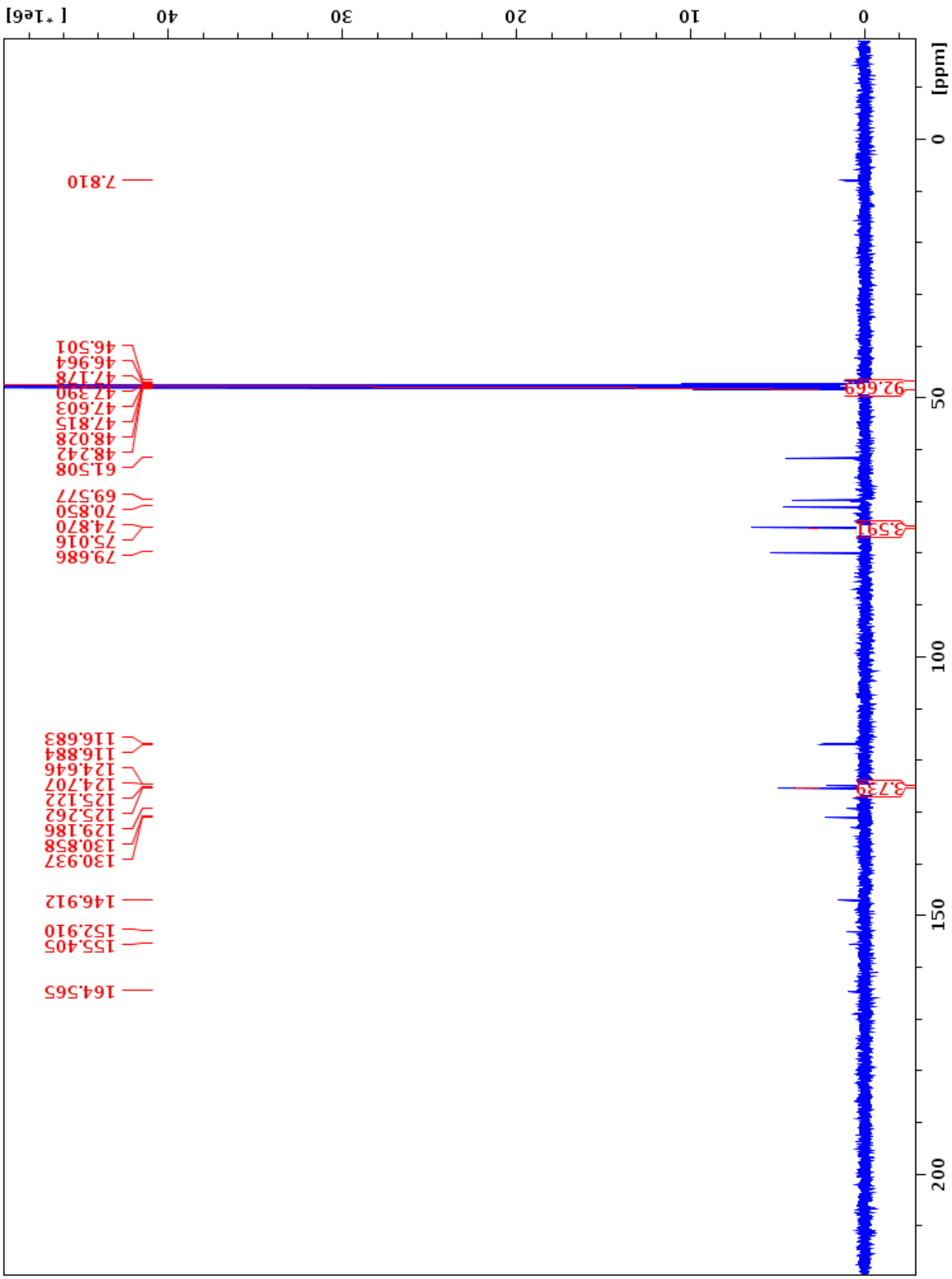
1i: 1-(3-fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



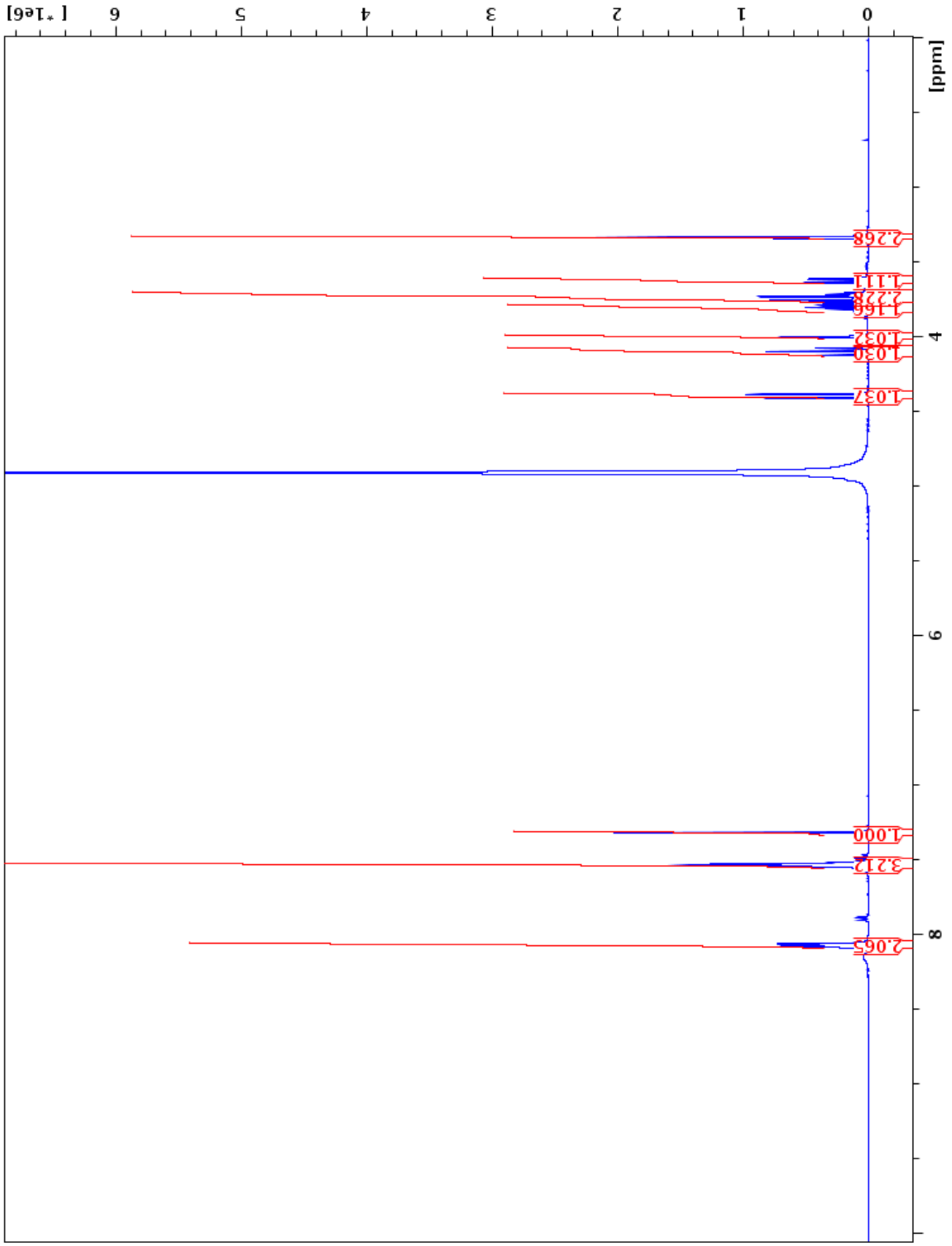
1j: 1-(2-fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



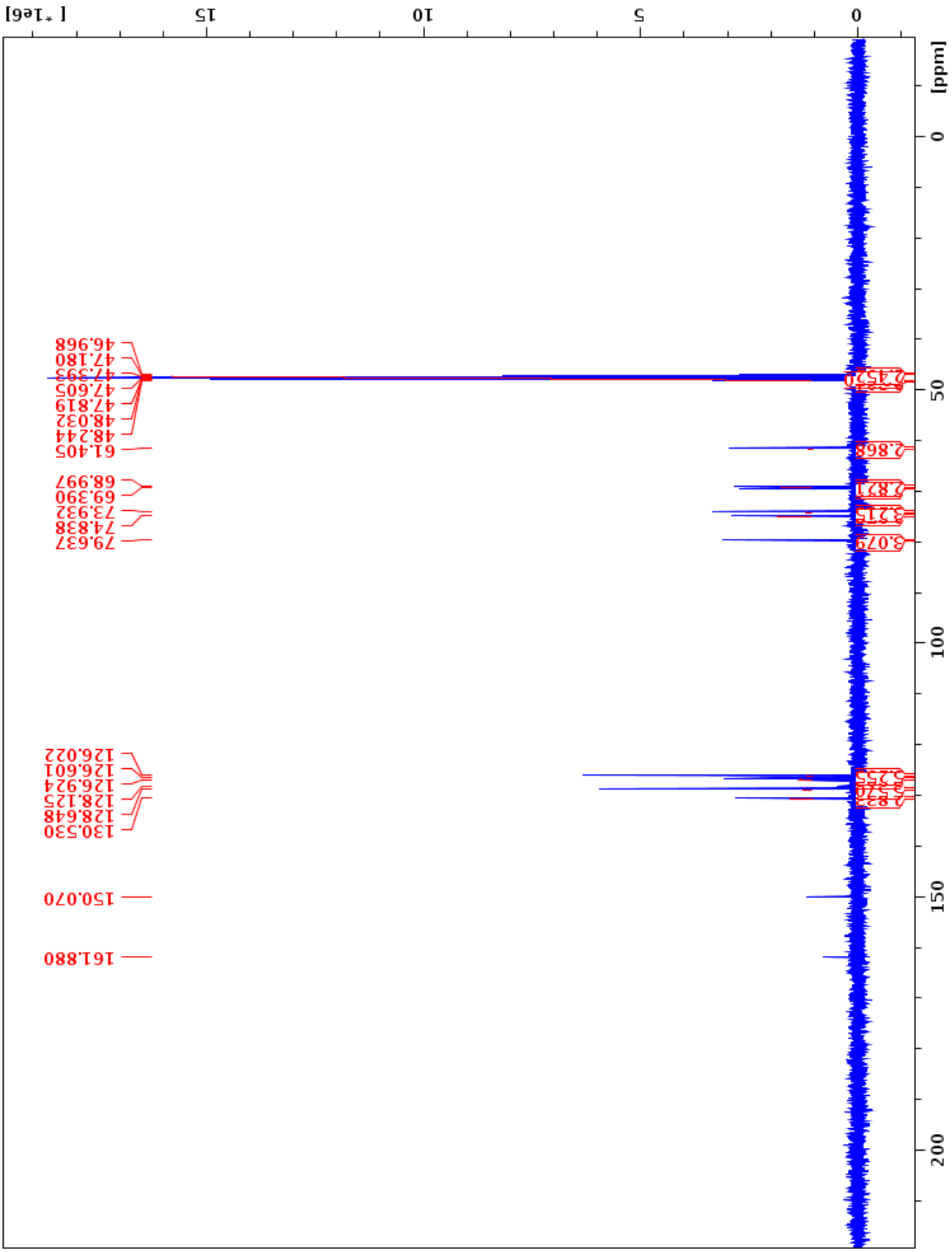
1j: 1-(2-fluorophenyl)-4-(1-deoxy-β-D-galactopyranosyl)triazole



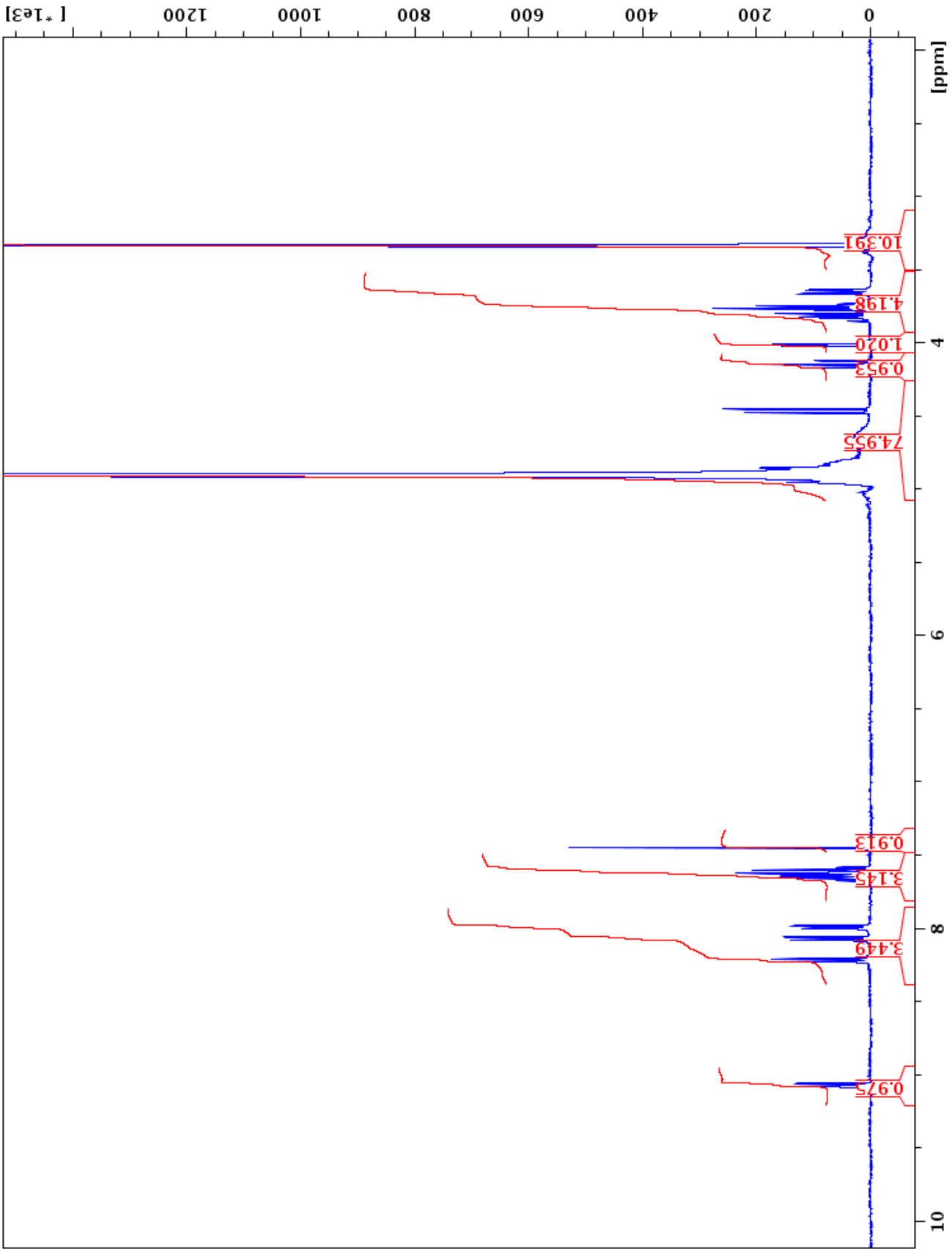
2a: 2-phenyl-5-(1-deoxy-β-D-galactopyranosyl)oxazole



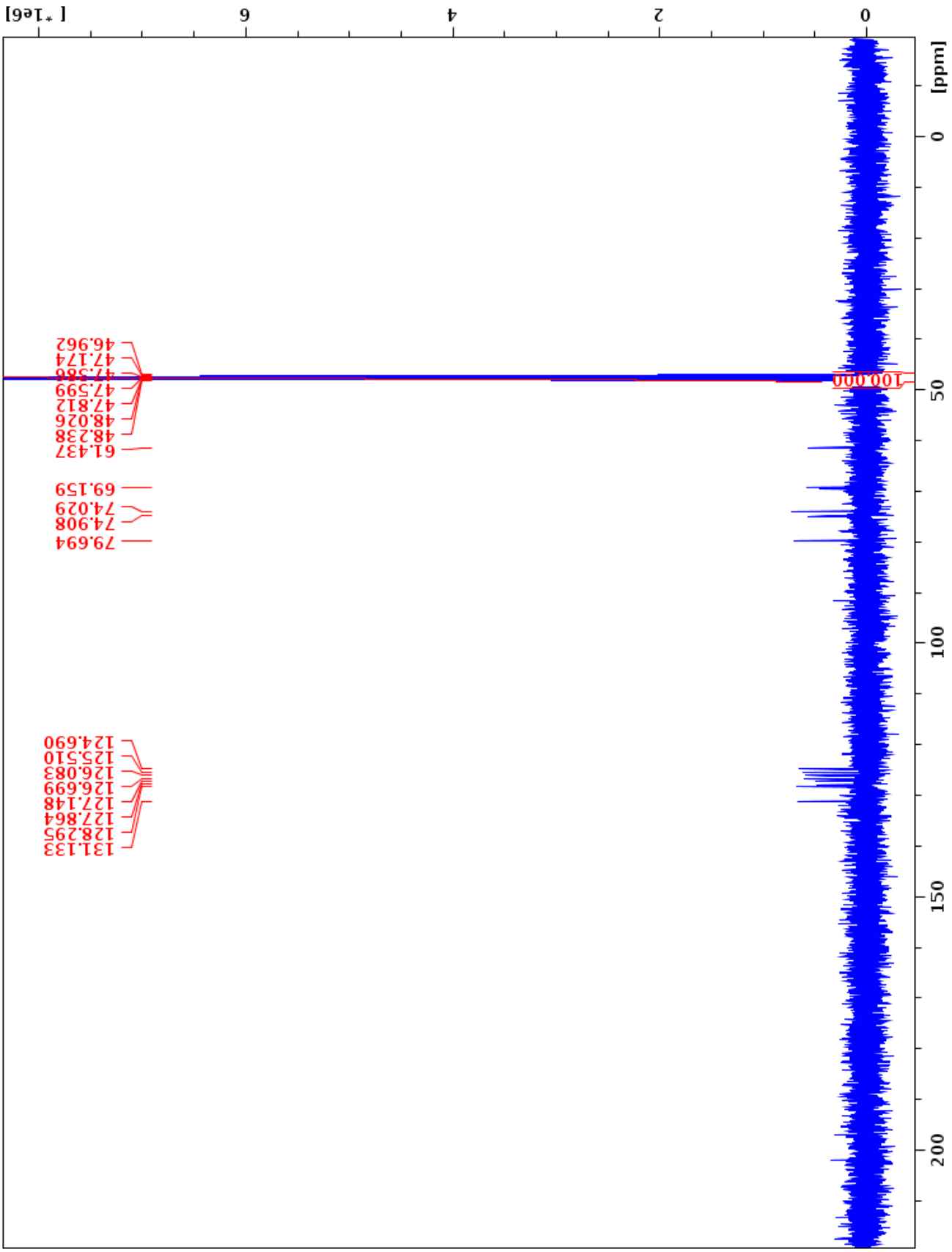
2a: 2-phenyl-5-(1-deoxy-β-D-galactopyranosyl)oxazole



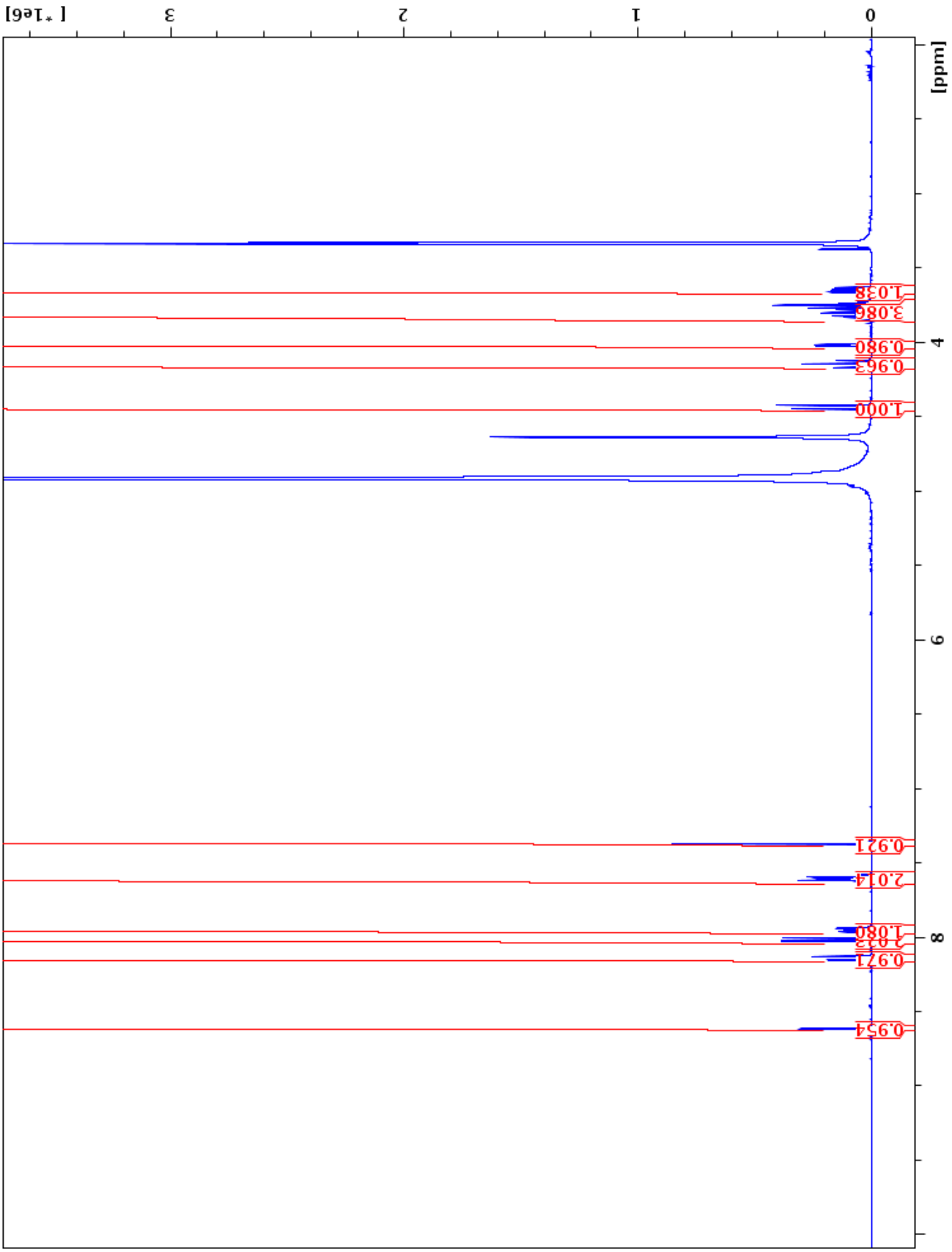
2b: 2-naphth-1-yl-5-(1-deoxy-β-D-galactopyranosyl)oxazole



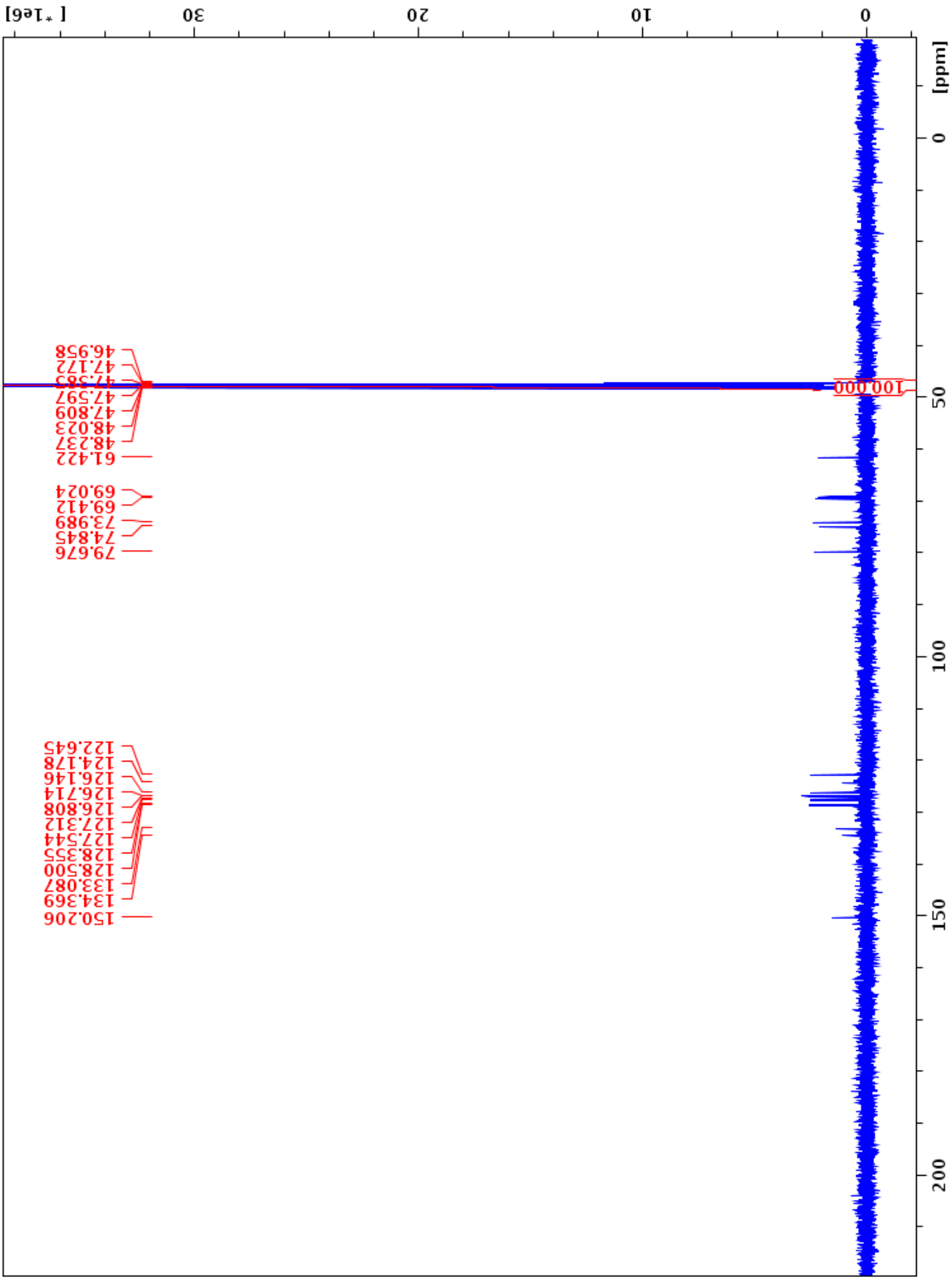
2b: 2-naphth-1-yl-5-(1-deoxy-β-D-galactopyranosyl)oxazole



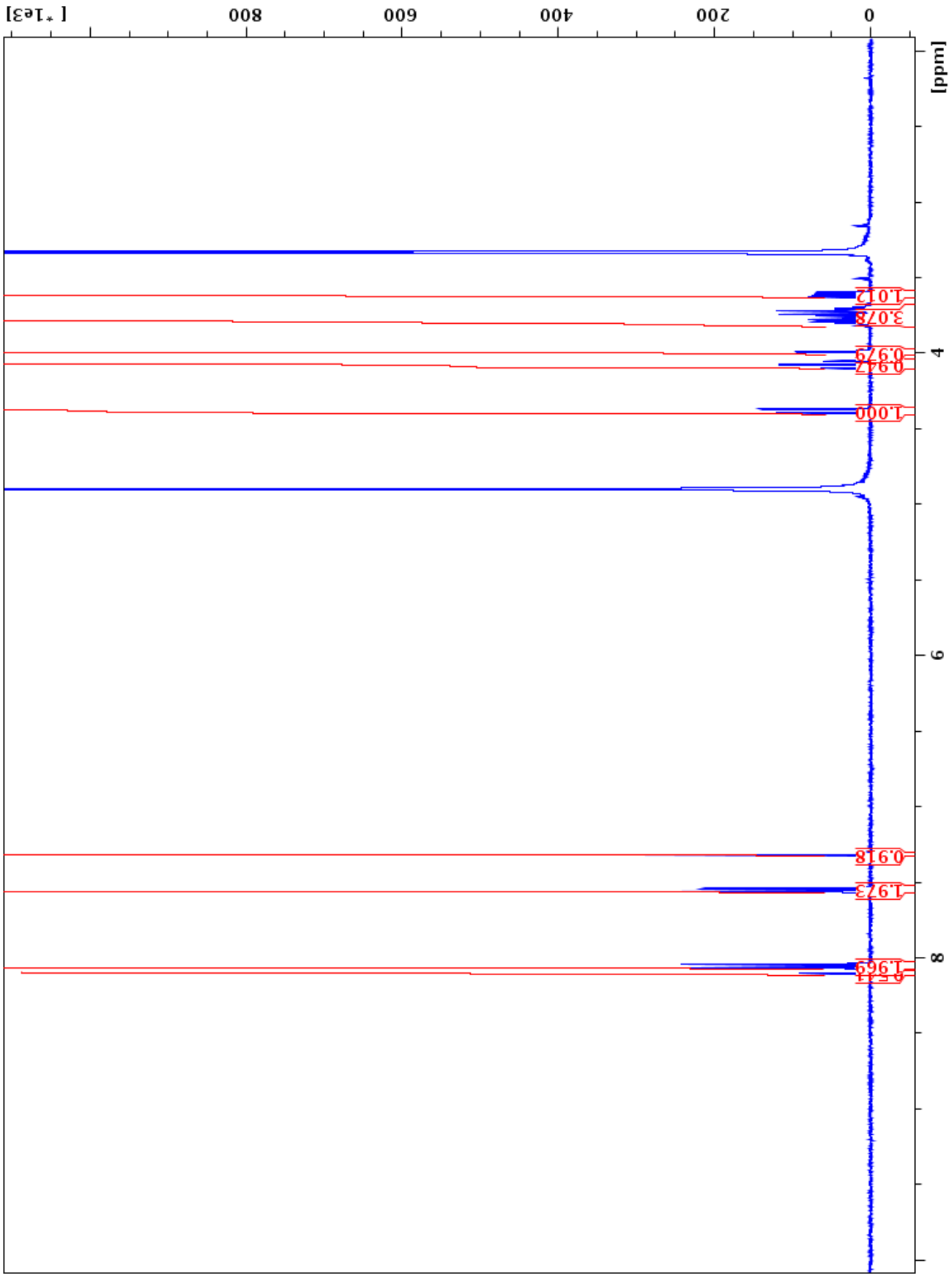
2c: 2-naphth-2-yl-5-(1-deoxy-β-D-galactopyranosyl)oxazole



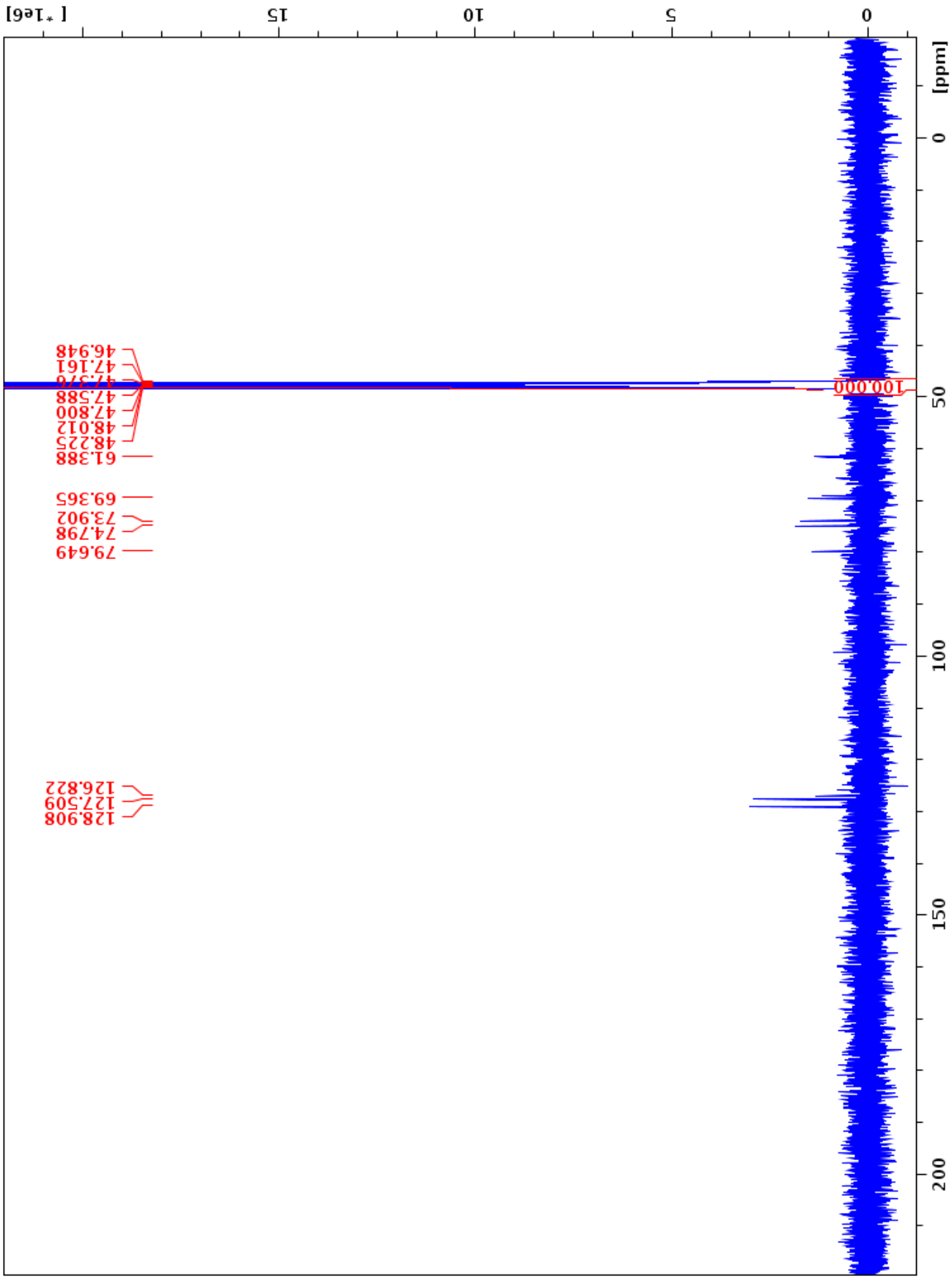
2c: 2-naphth-2-yl-5-(1-deoxy-β-D-galactopyranosyl)oxazole



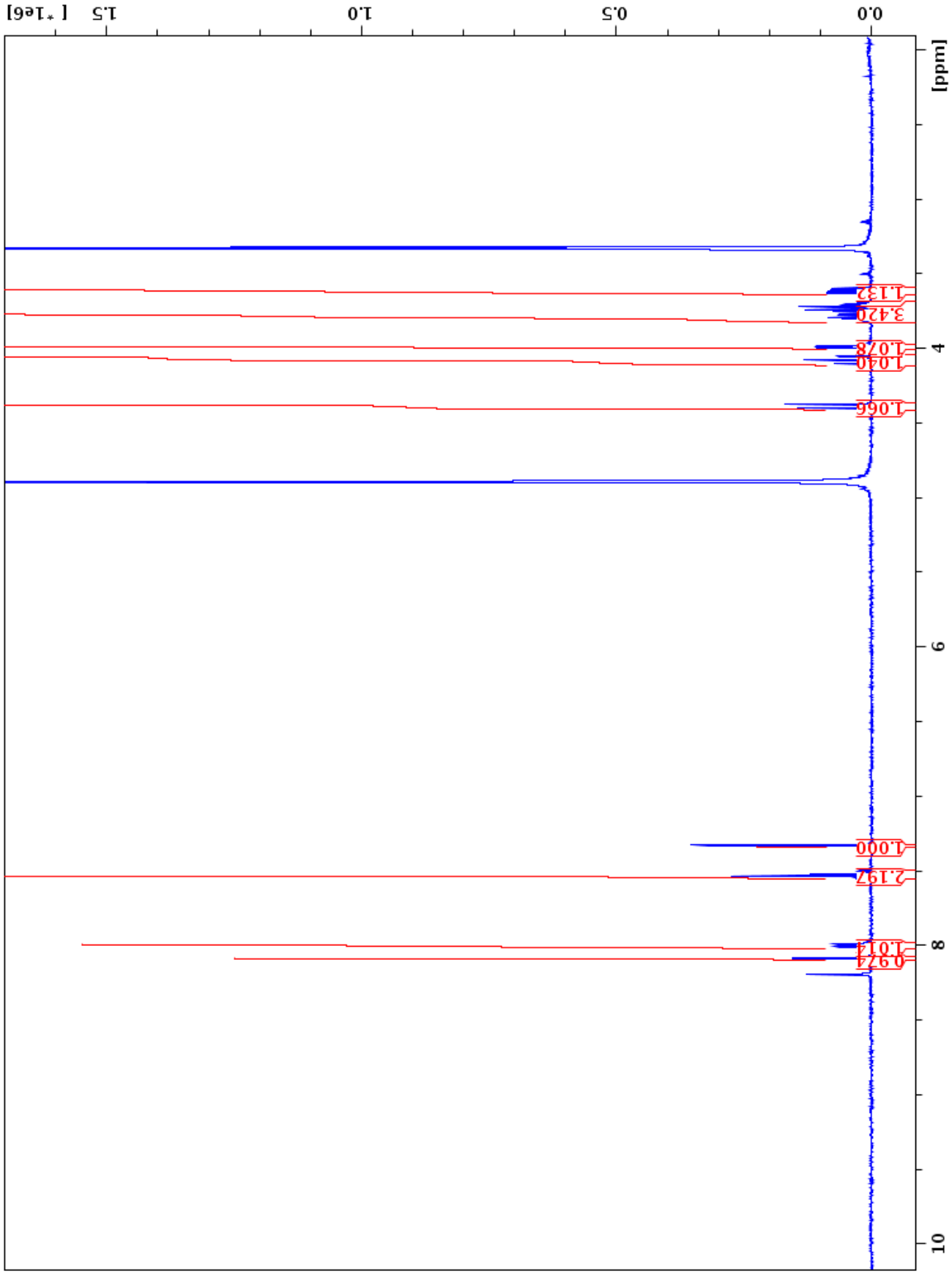
2d: 2-(4-chlorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



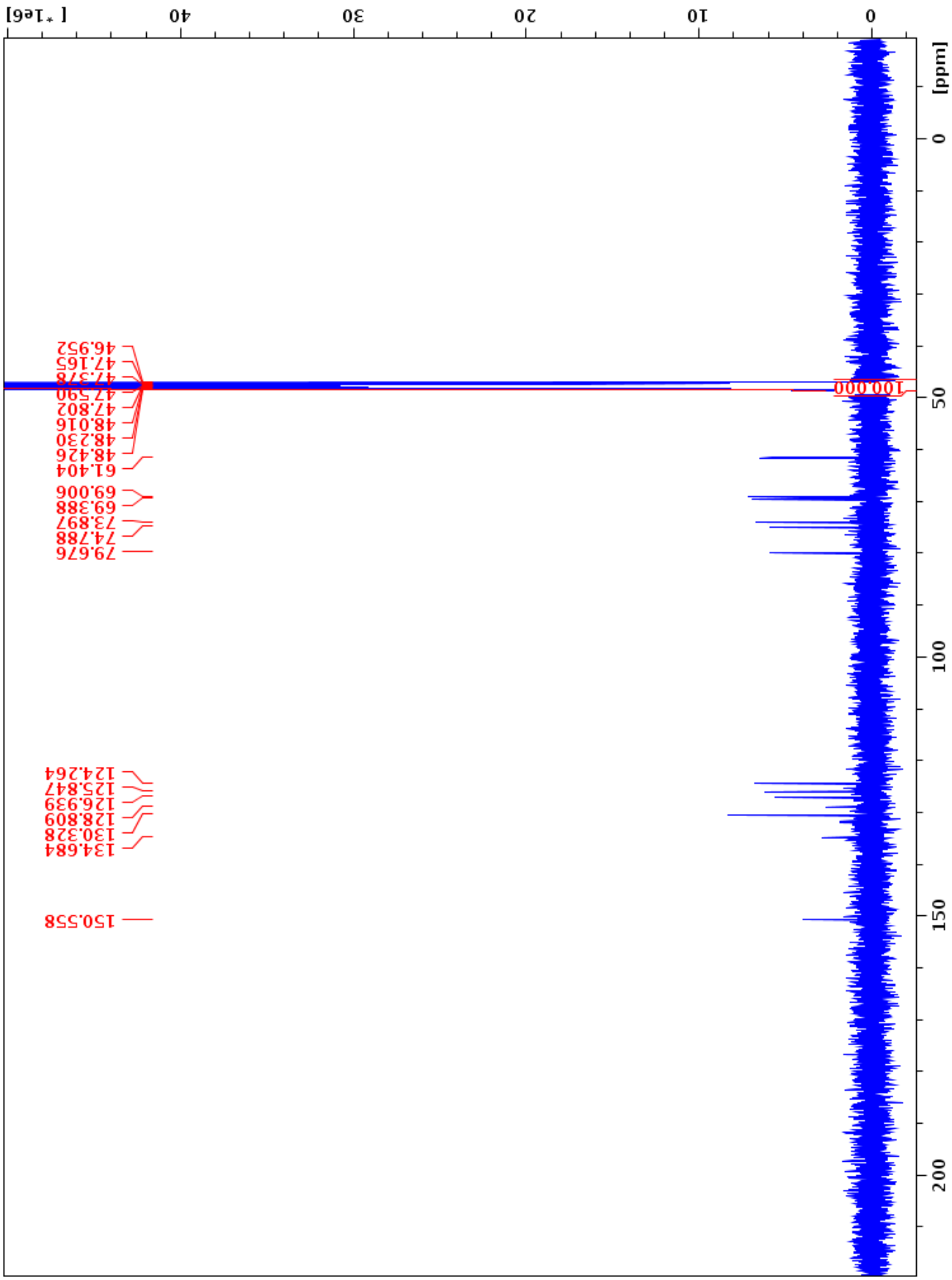
2d: 2-(4-chlorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



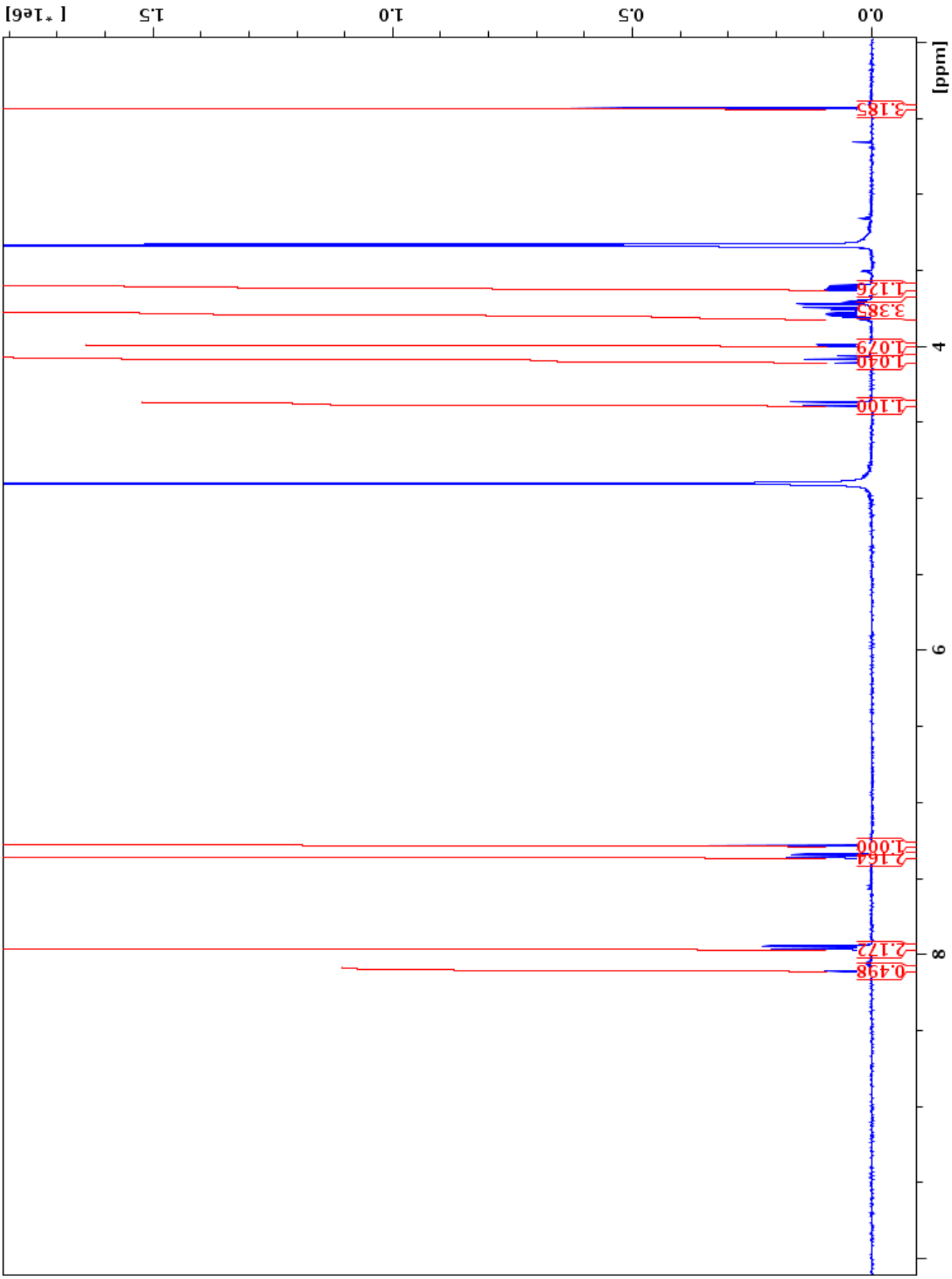
2e: 2-(3-chlorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



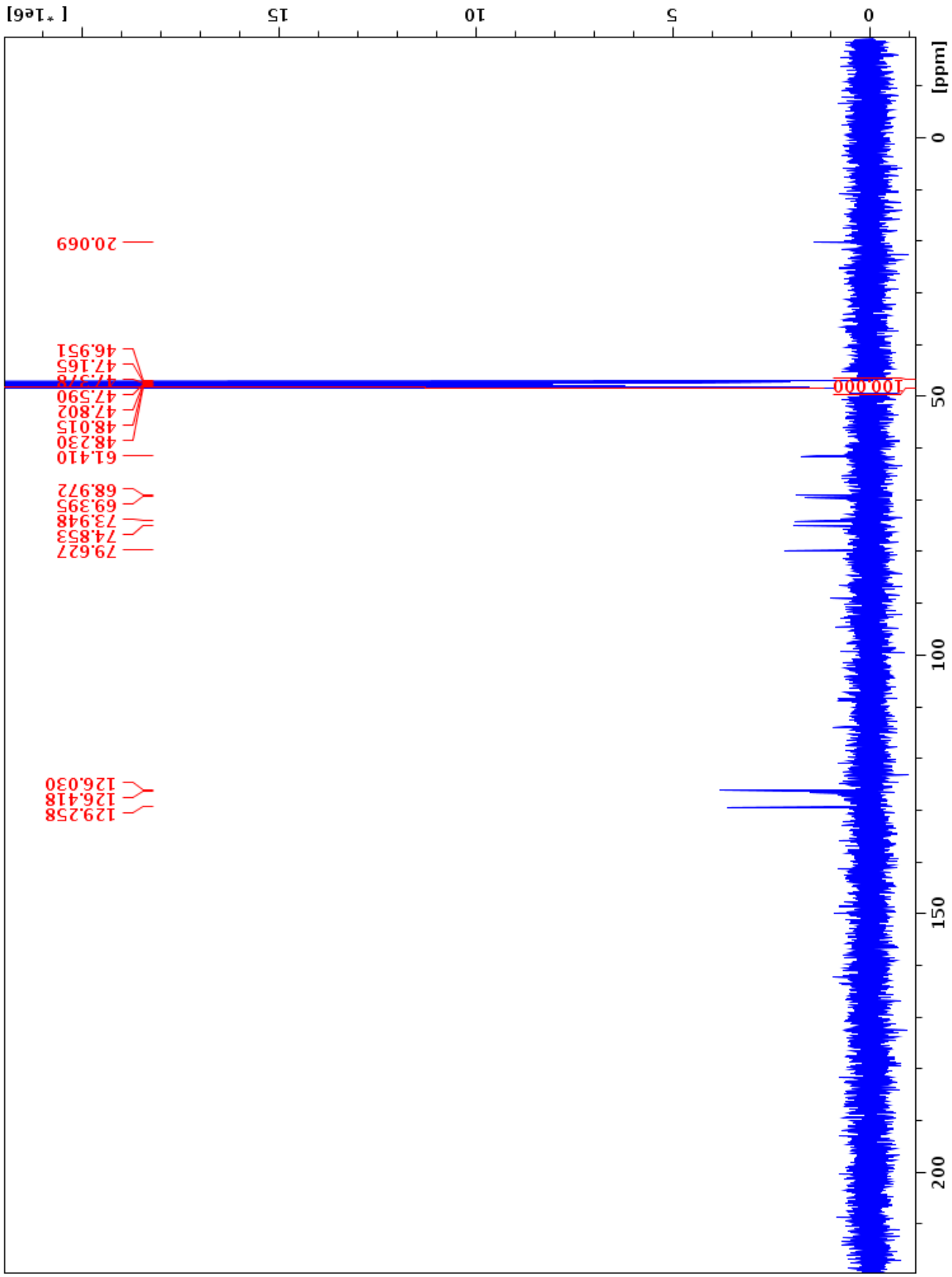
2e: 2-(3-chlorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



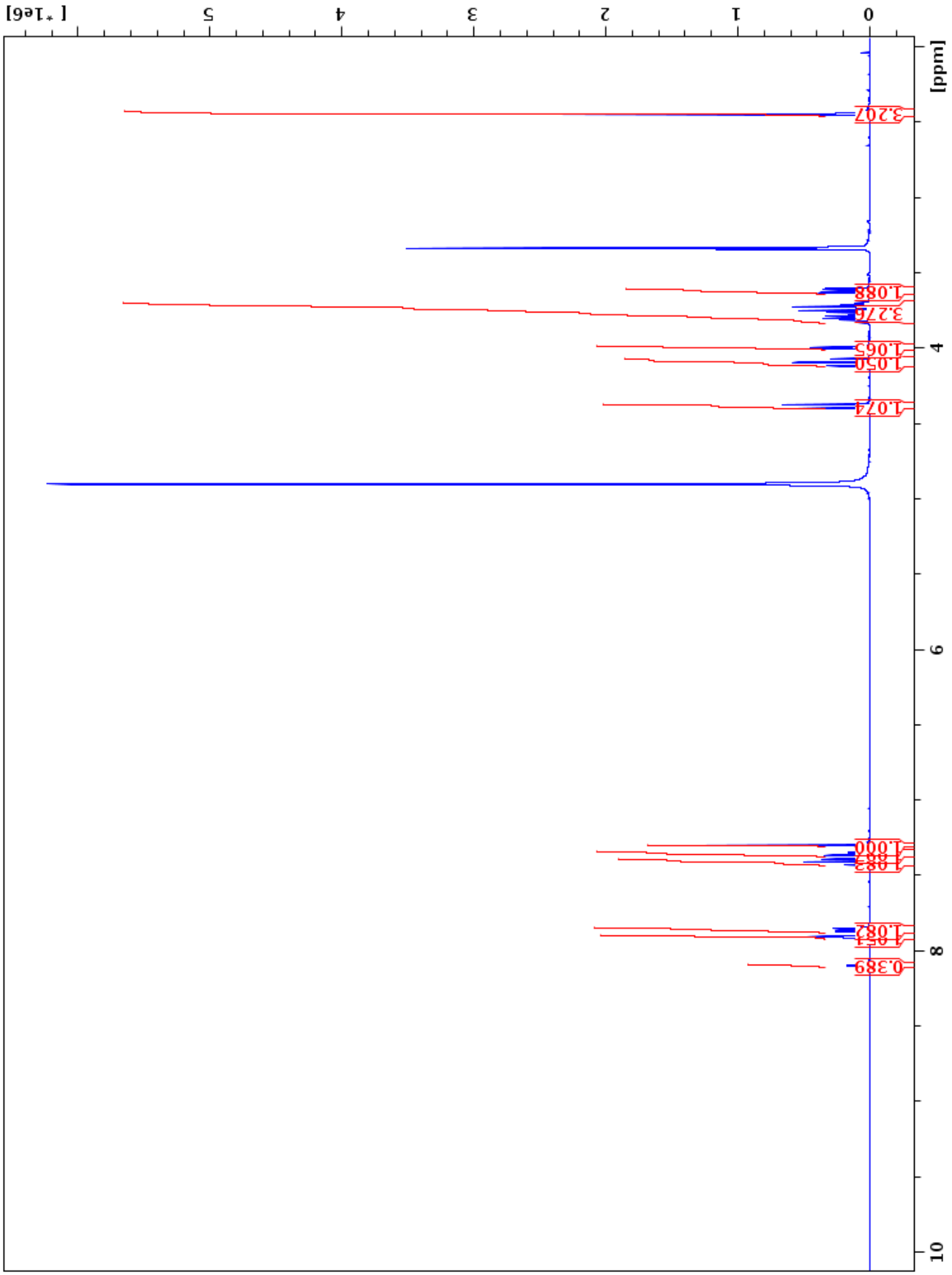
2f: 2-(4-methylphenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



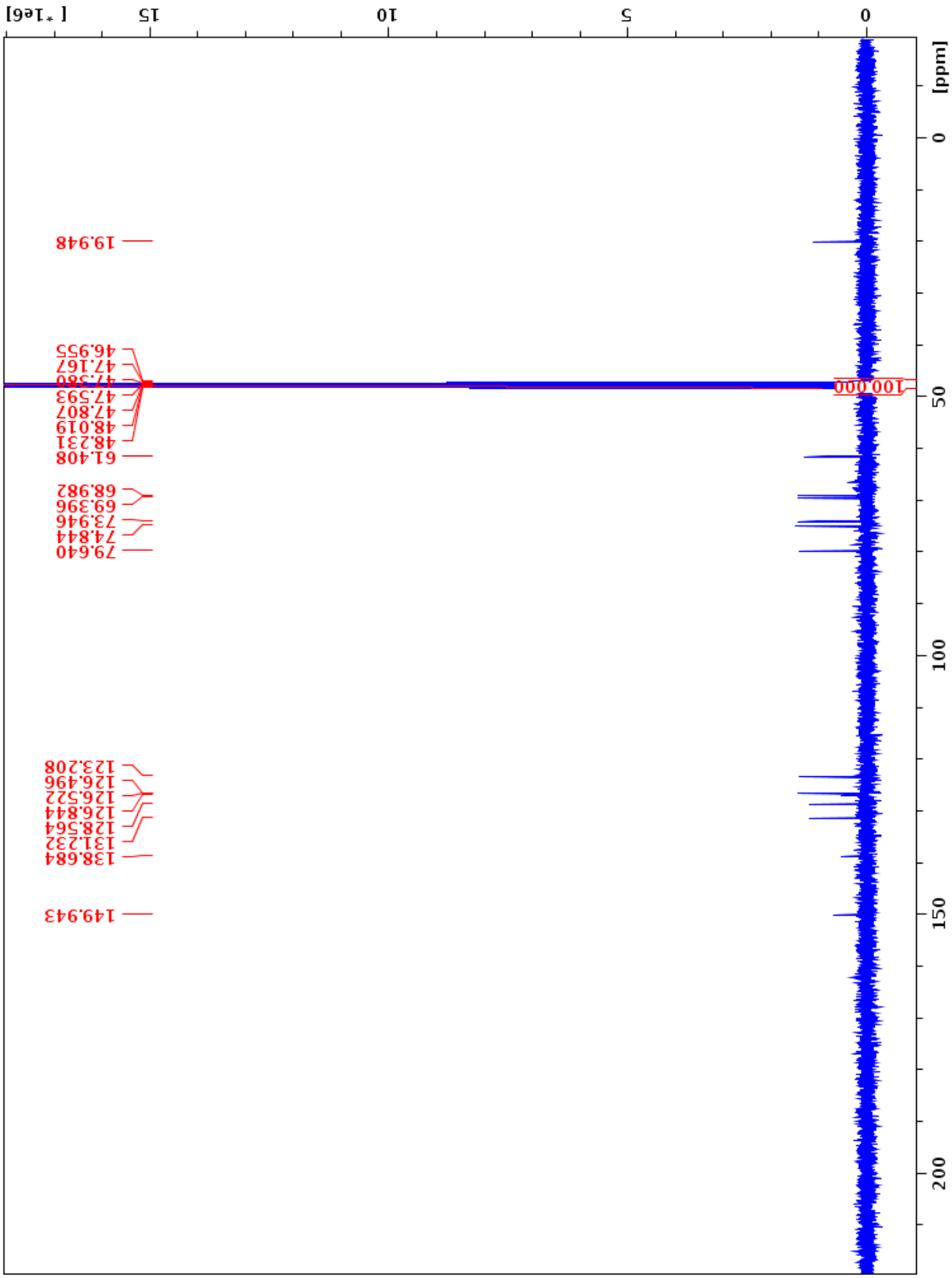
2f: 2-(4-methylphenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



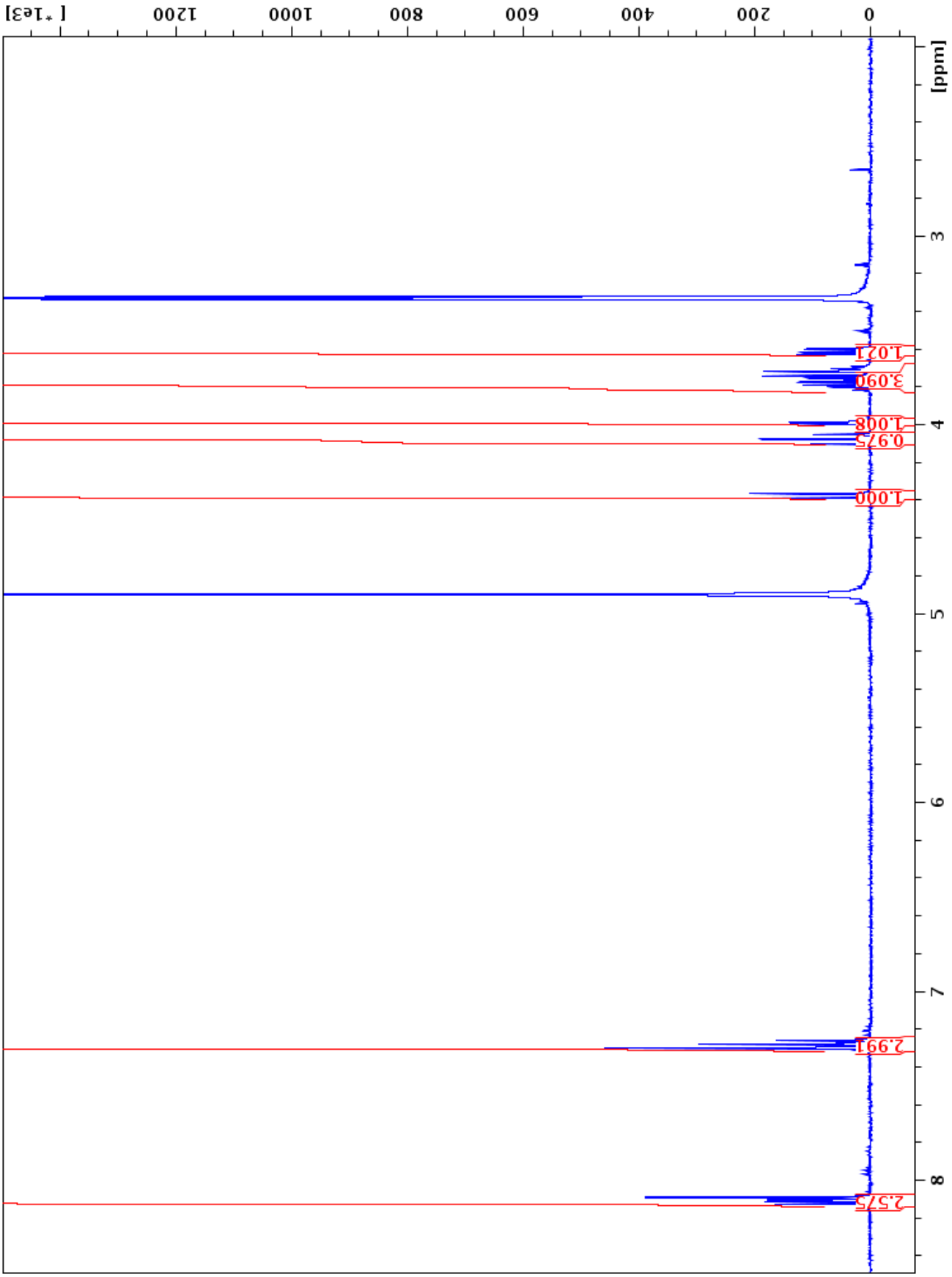
2g: 2-(3-methylphenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



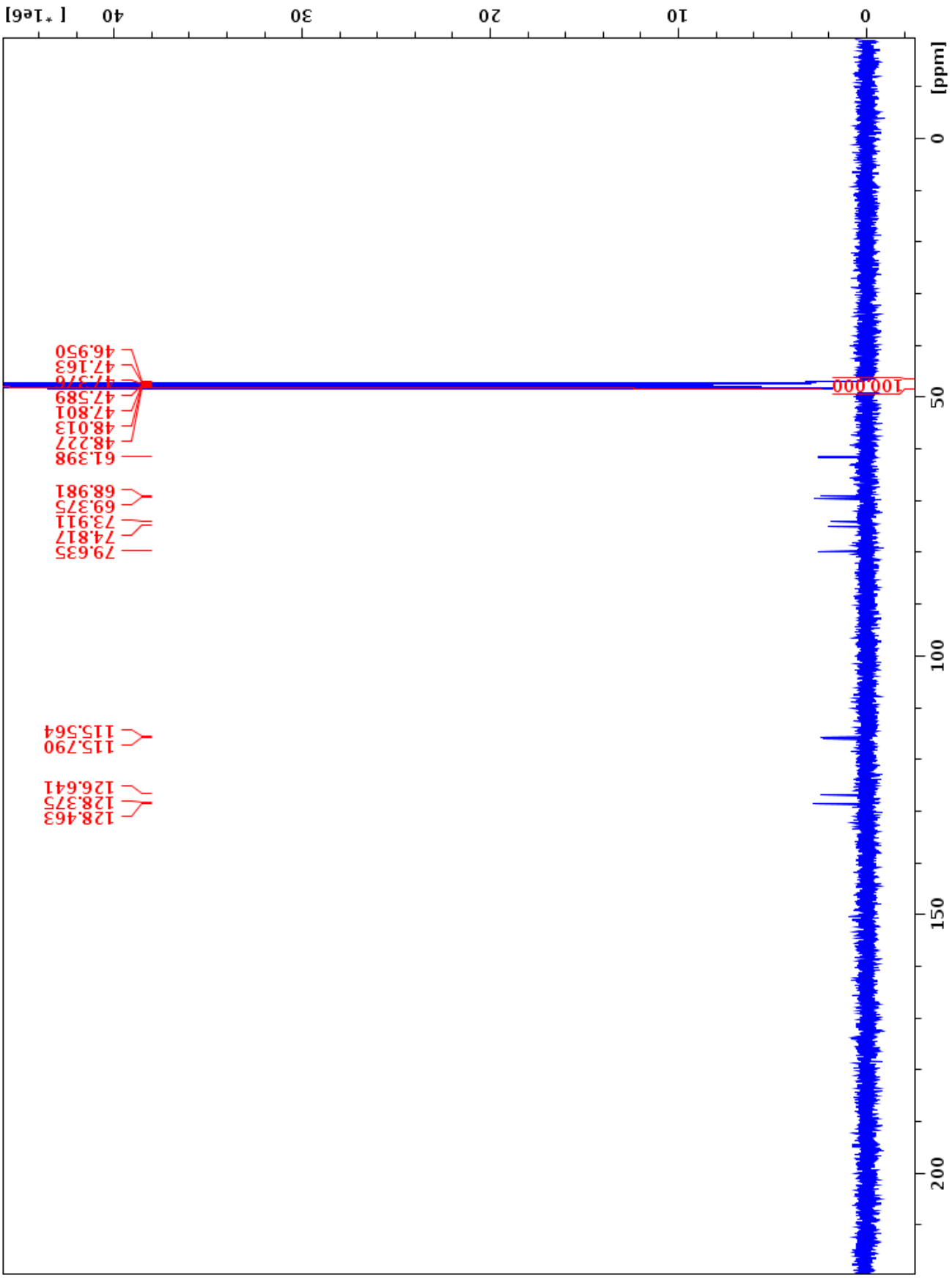
2g: 2-(3-methylphenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



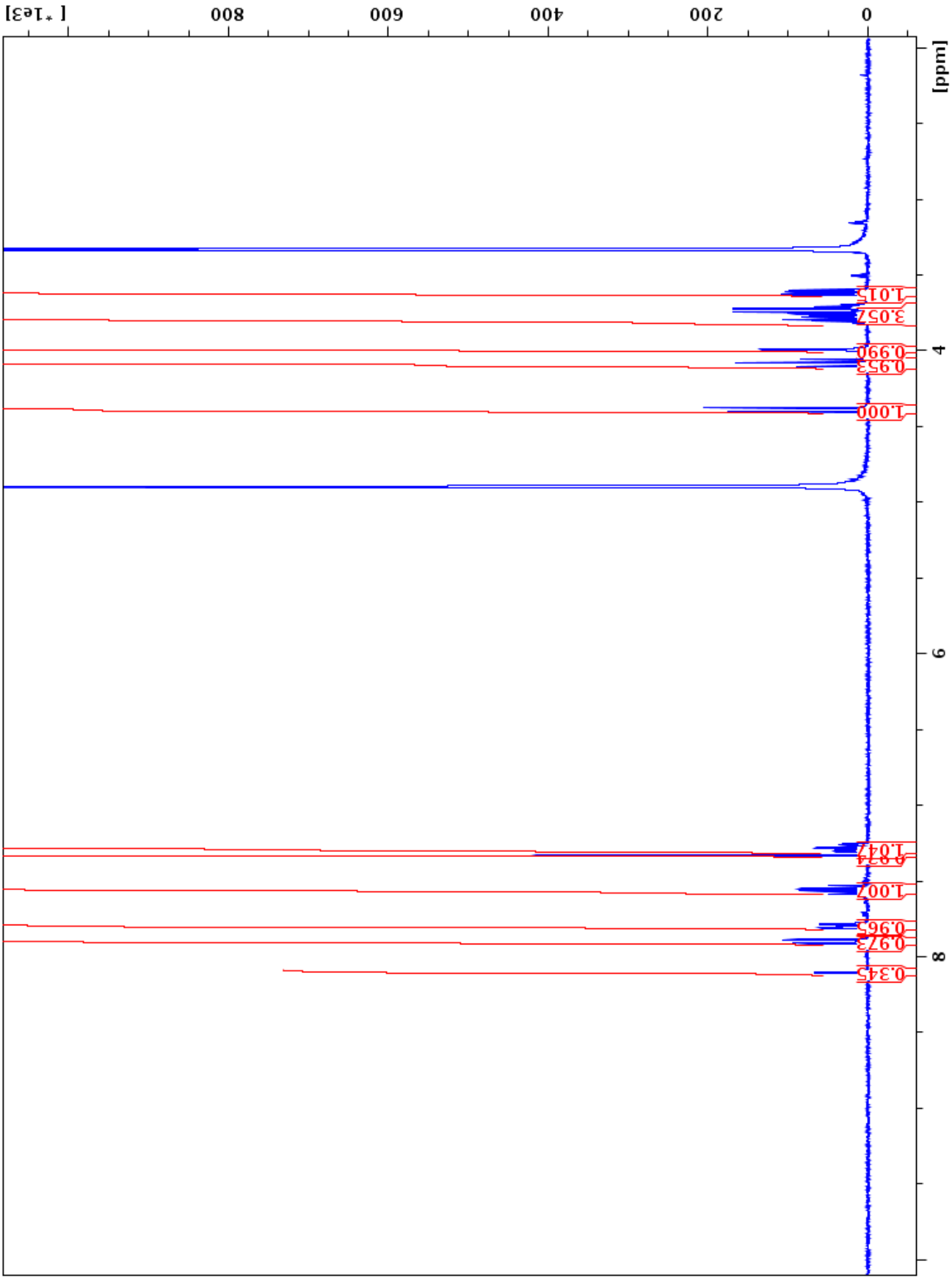
2h: 2-(4-fluorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



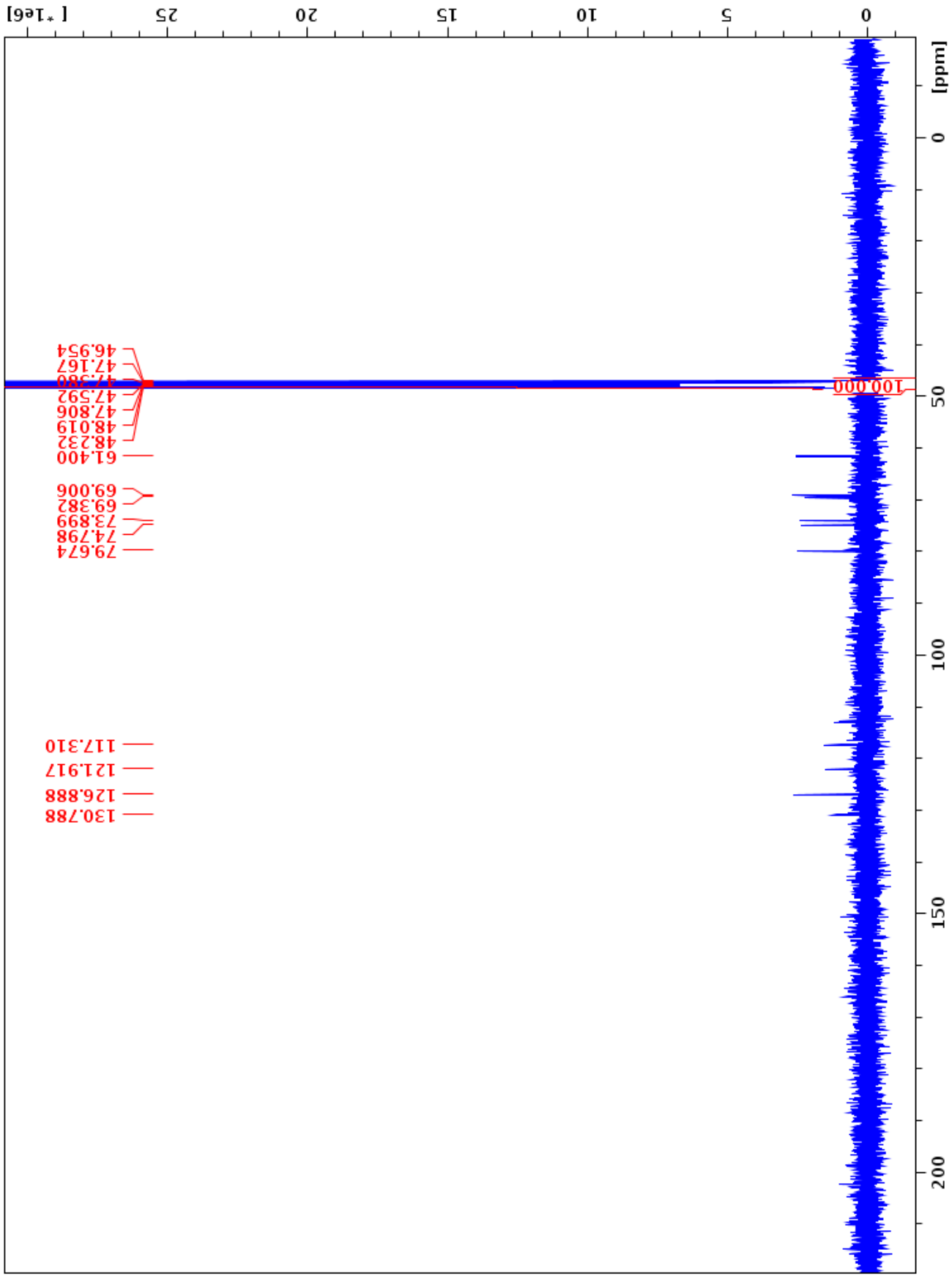
2h: 2-(4-fluorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



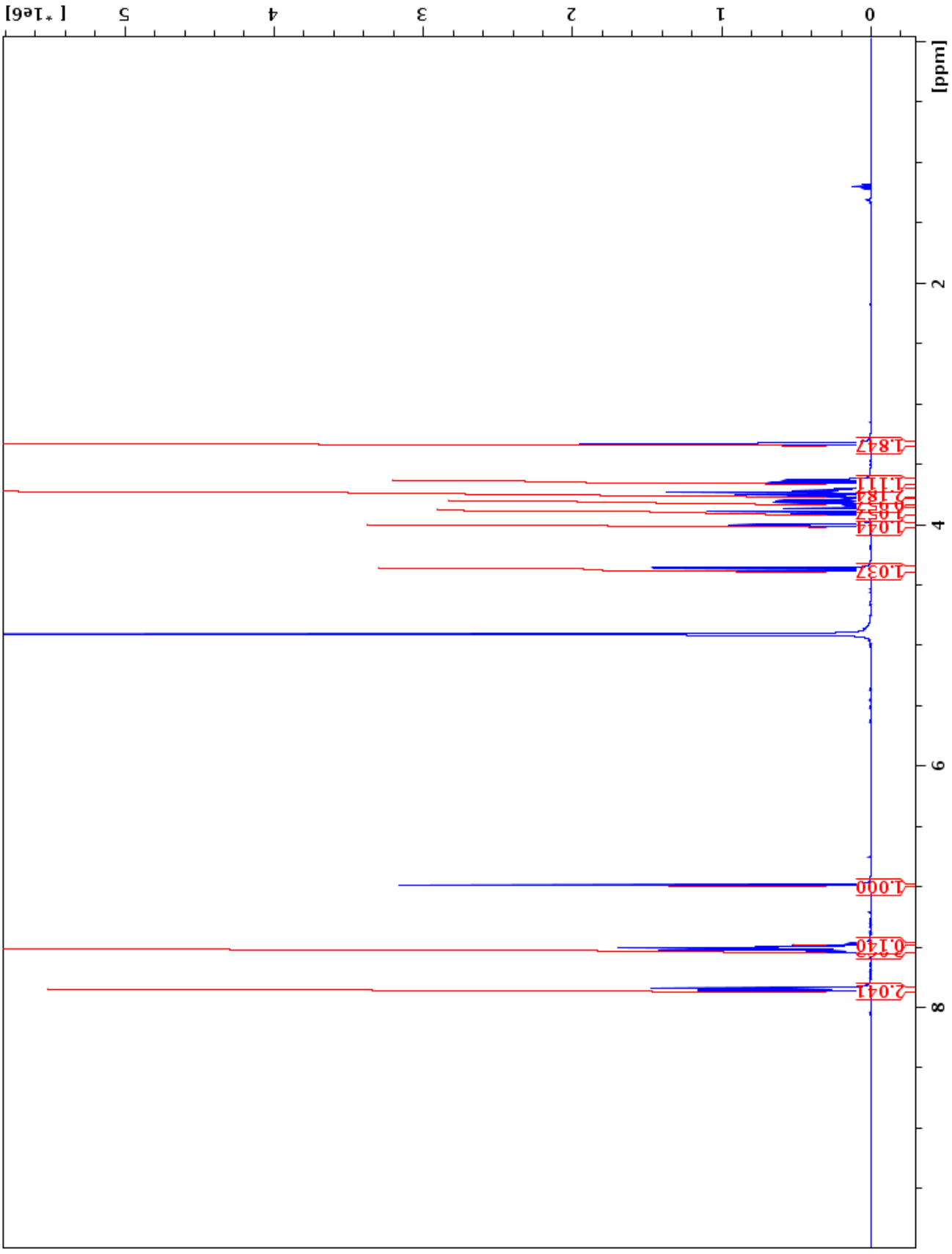
2i: 2-(3-fluorophenyl)-5-(1-deoxy-β-D-galactopyranosyl)oxazole



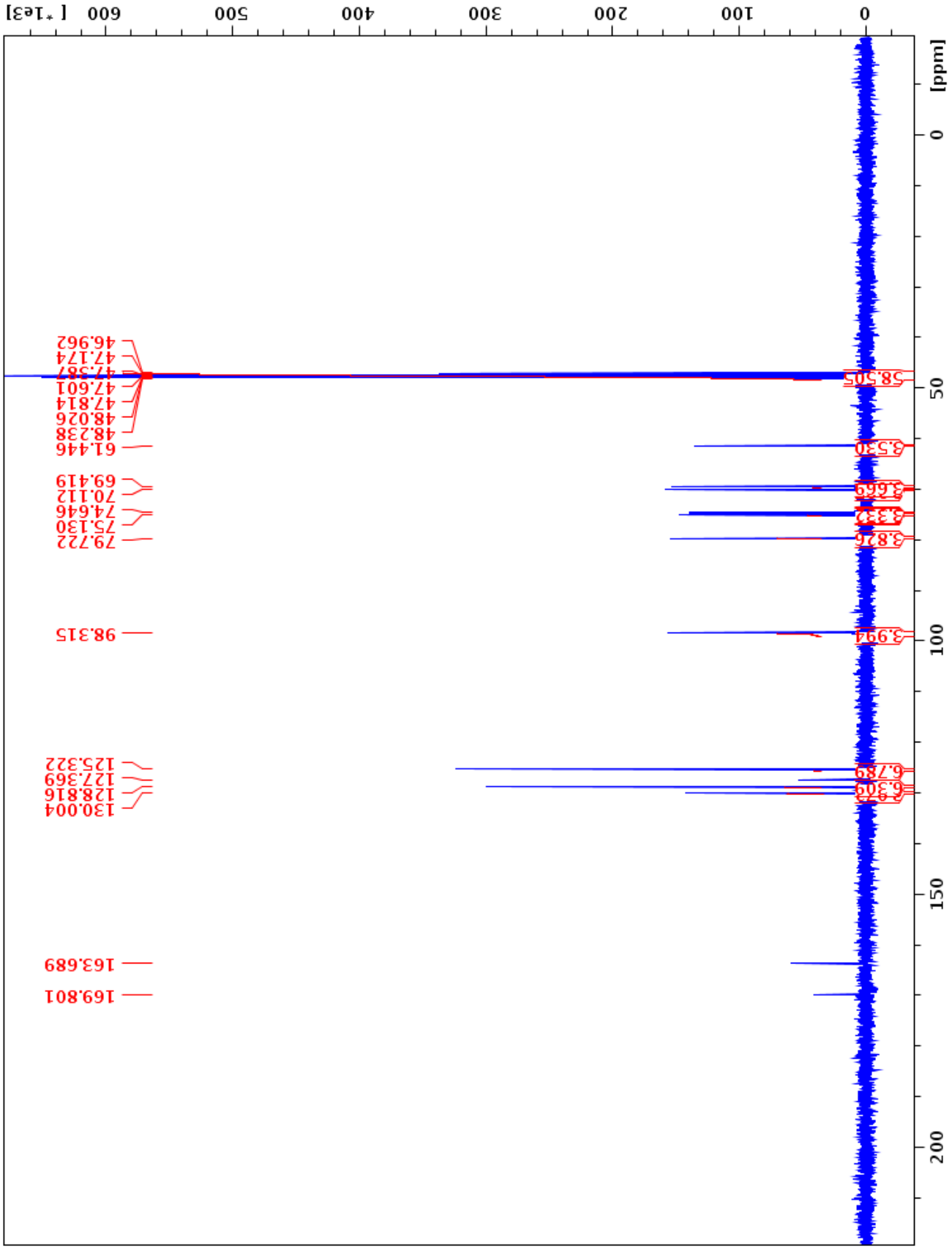
2i: 2-(3-fluorophenyl)-5-(1-deoxy-β-D-galactopranosyl)oxazole



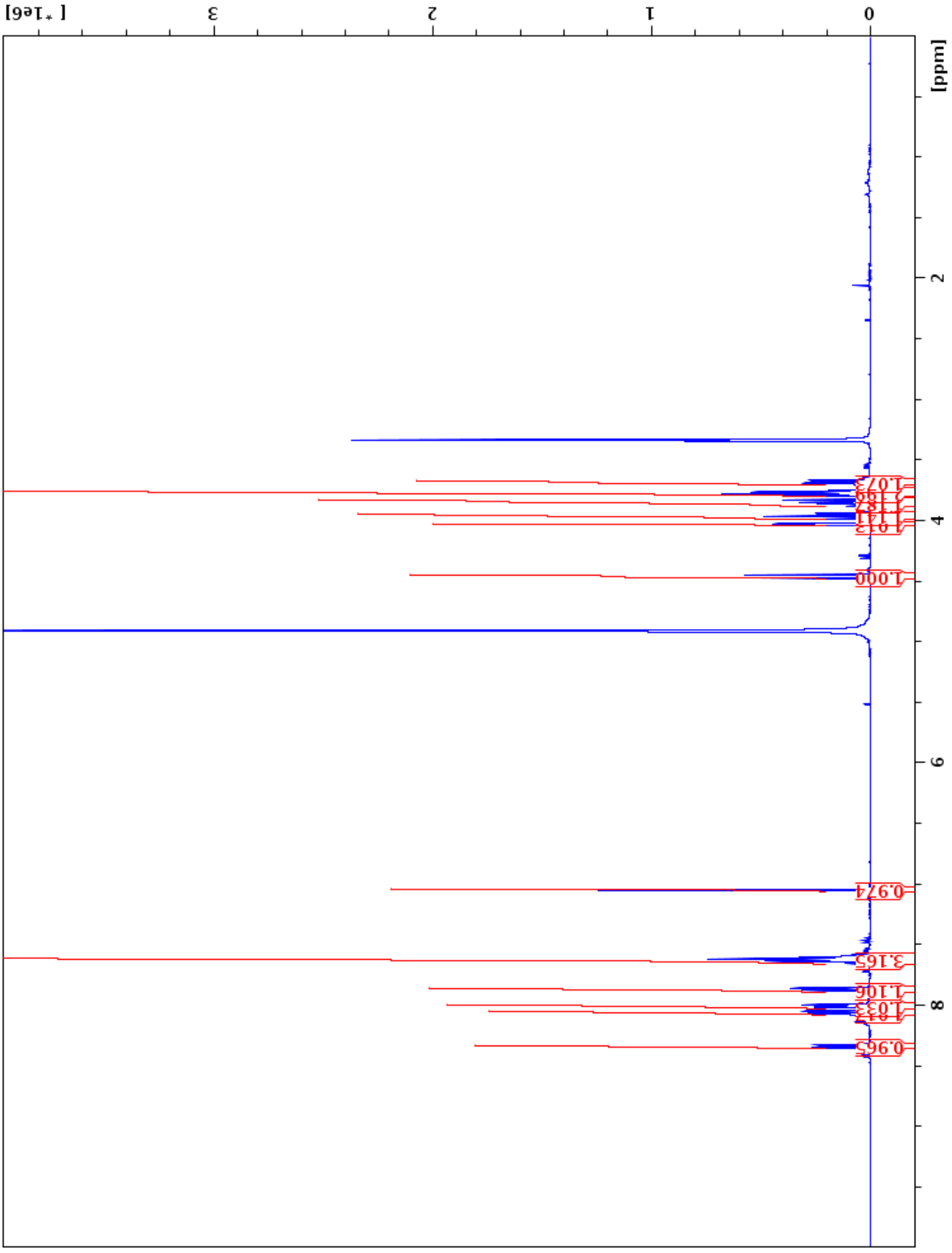
3a: 3-phenyl-5-(1-deoxy- β-D-galactopyranosyl)isoxazole



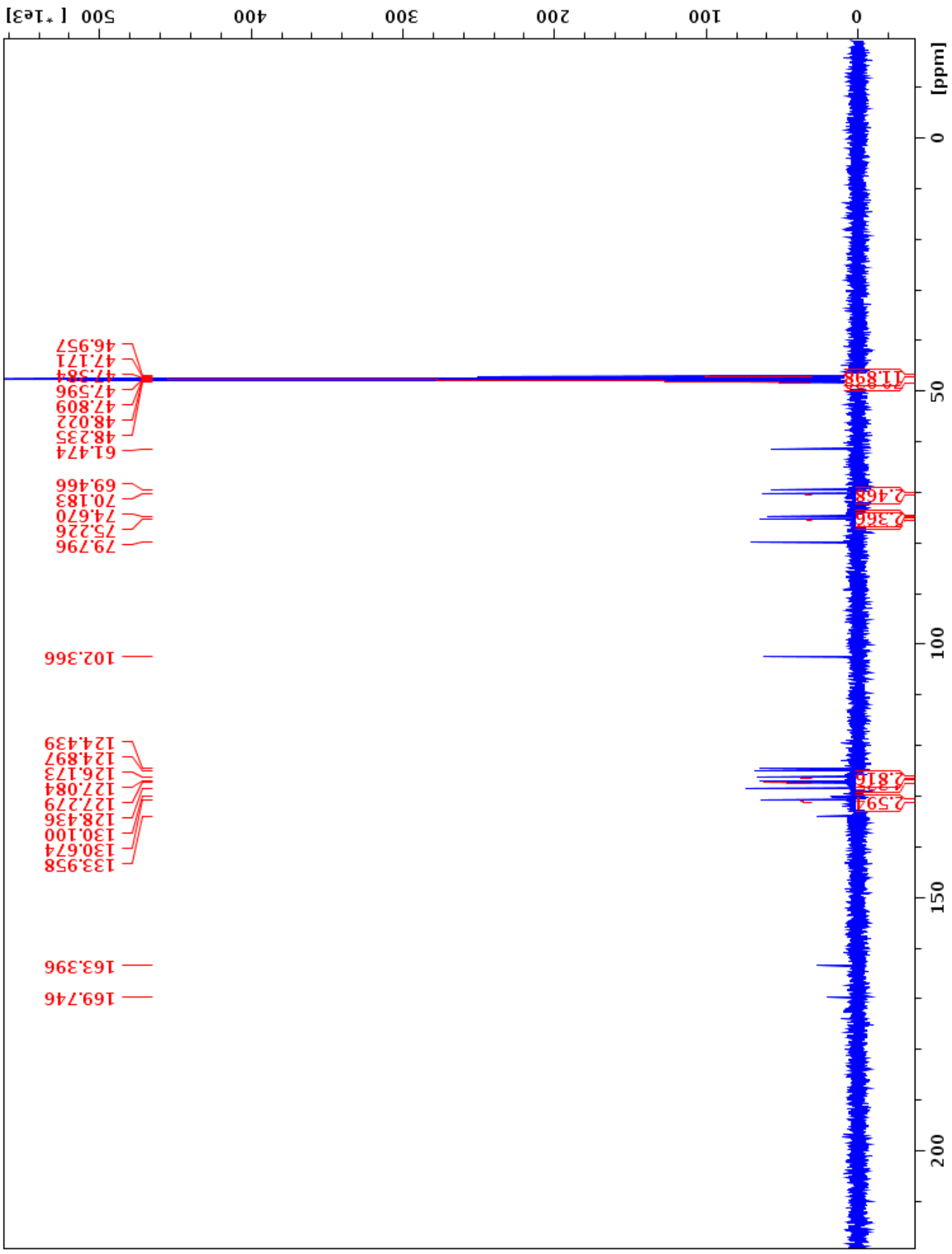
3a: 3-phenyl-5-(1-deoxy- β-D-galactopyranosyl)isoxazole



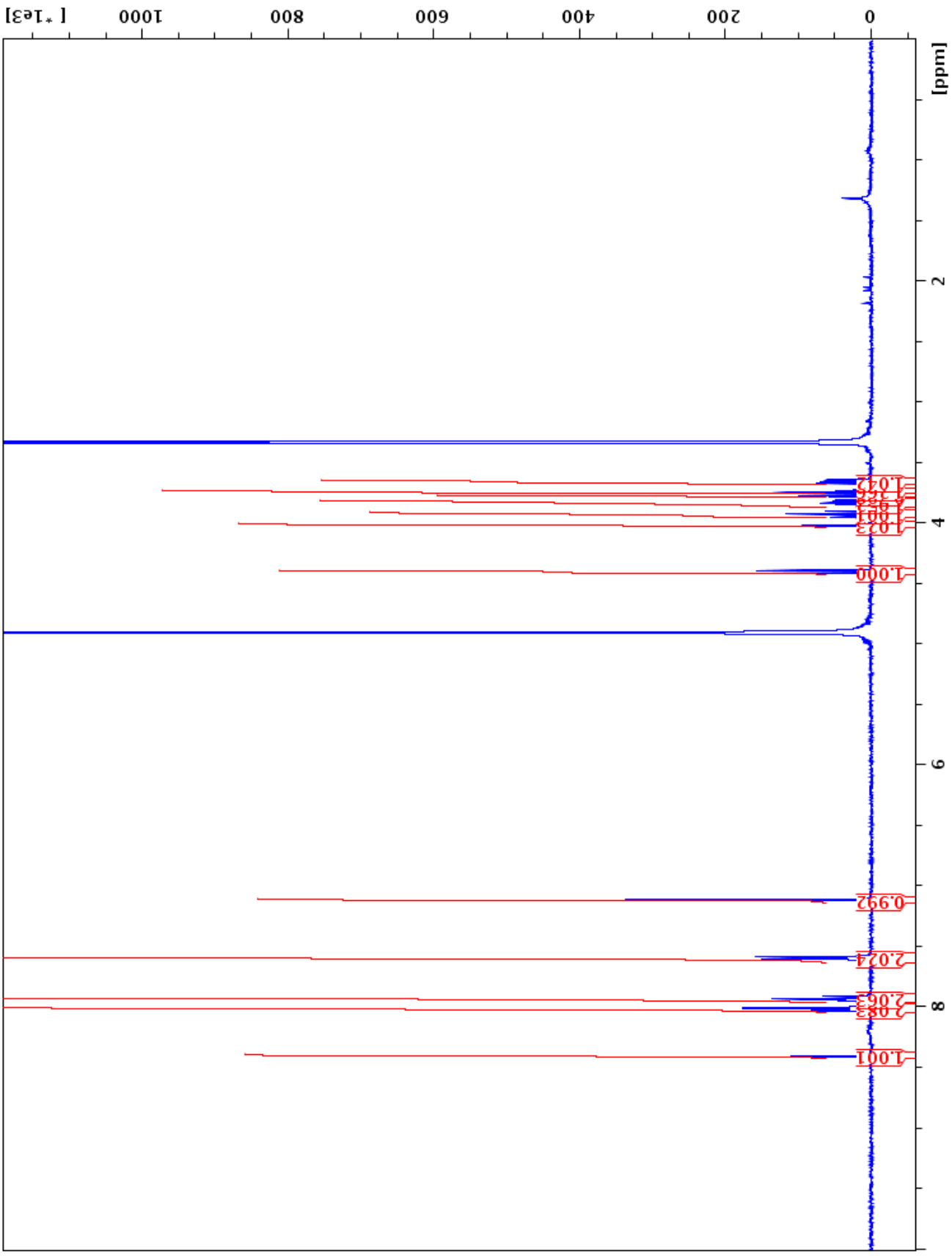
3b: 3-naphth-1-yl-(1-deoxy- β-D-galactopyranosyl)isoxazole



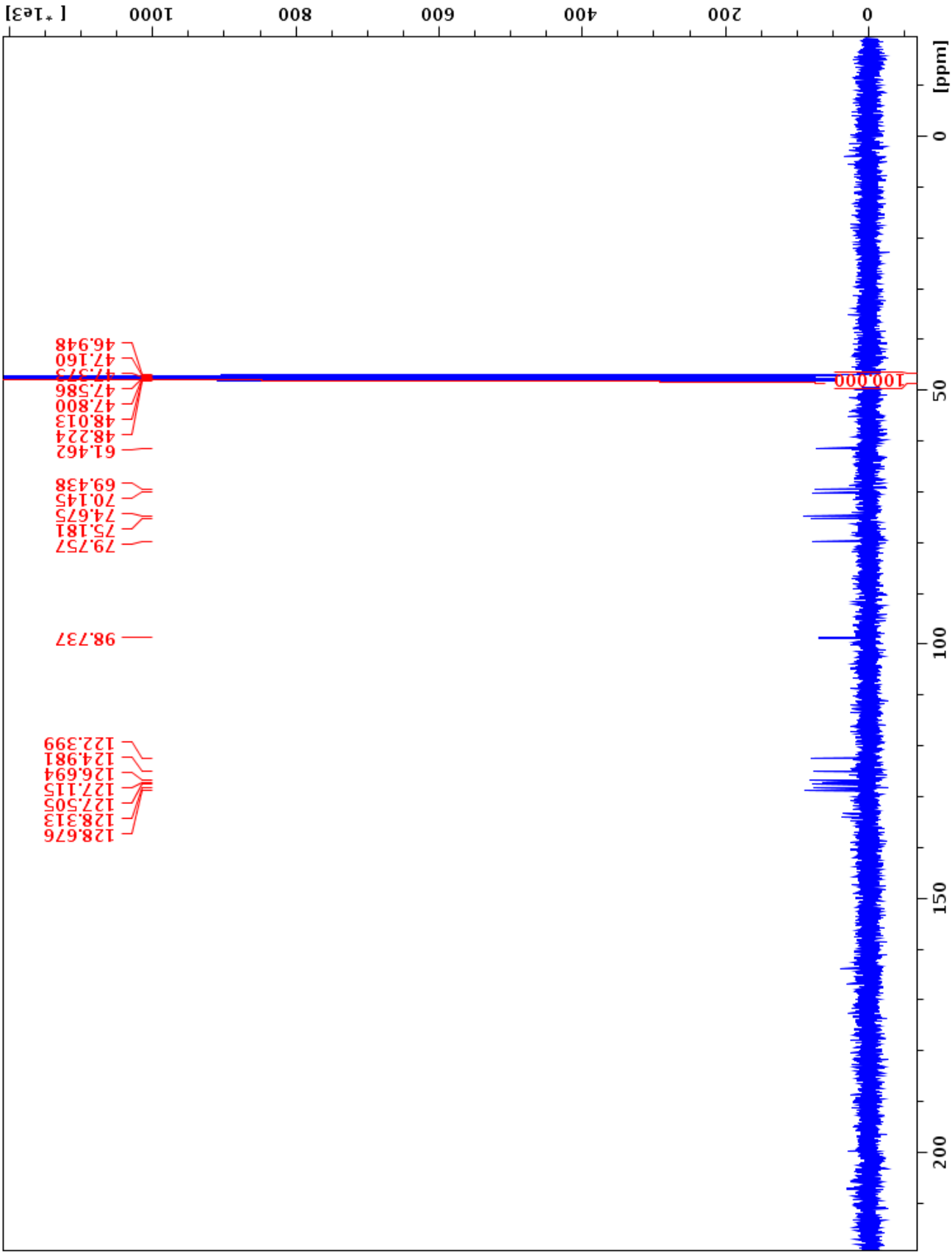
3b: 3-naphth-1-yl-5-(1-deoxy- β-D-galactopyranosyl)isoxazole



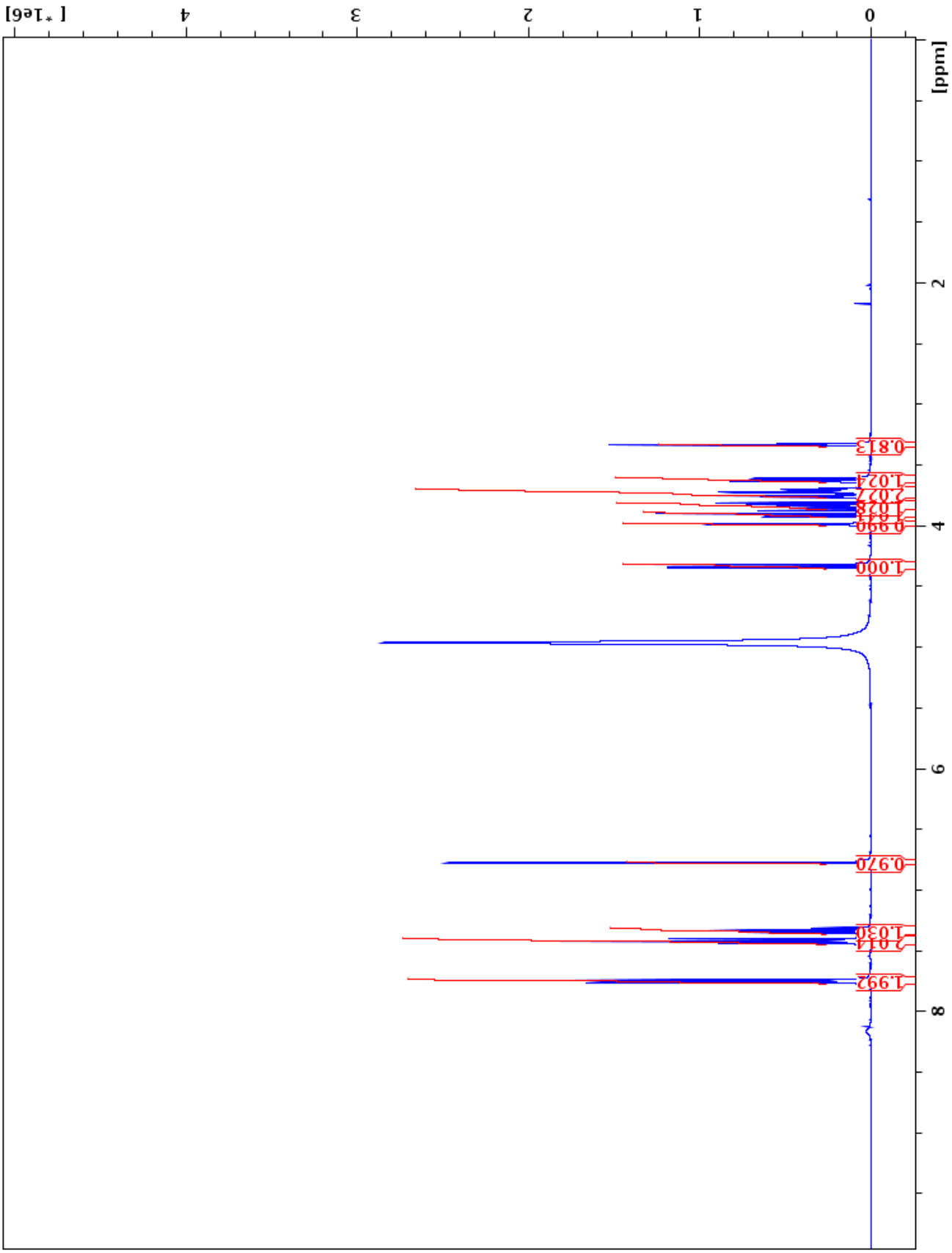
3c: 3-naphth-2-yl-5-(1-deoxy- β-D-galactopyranosyl)isoxazole



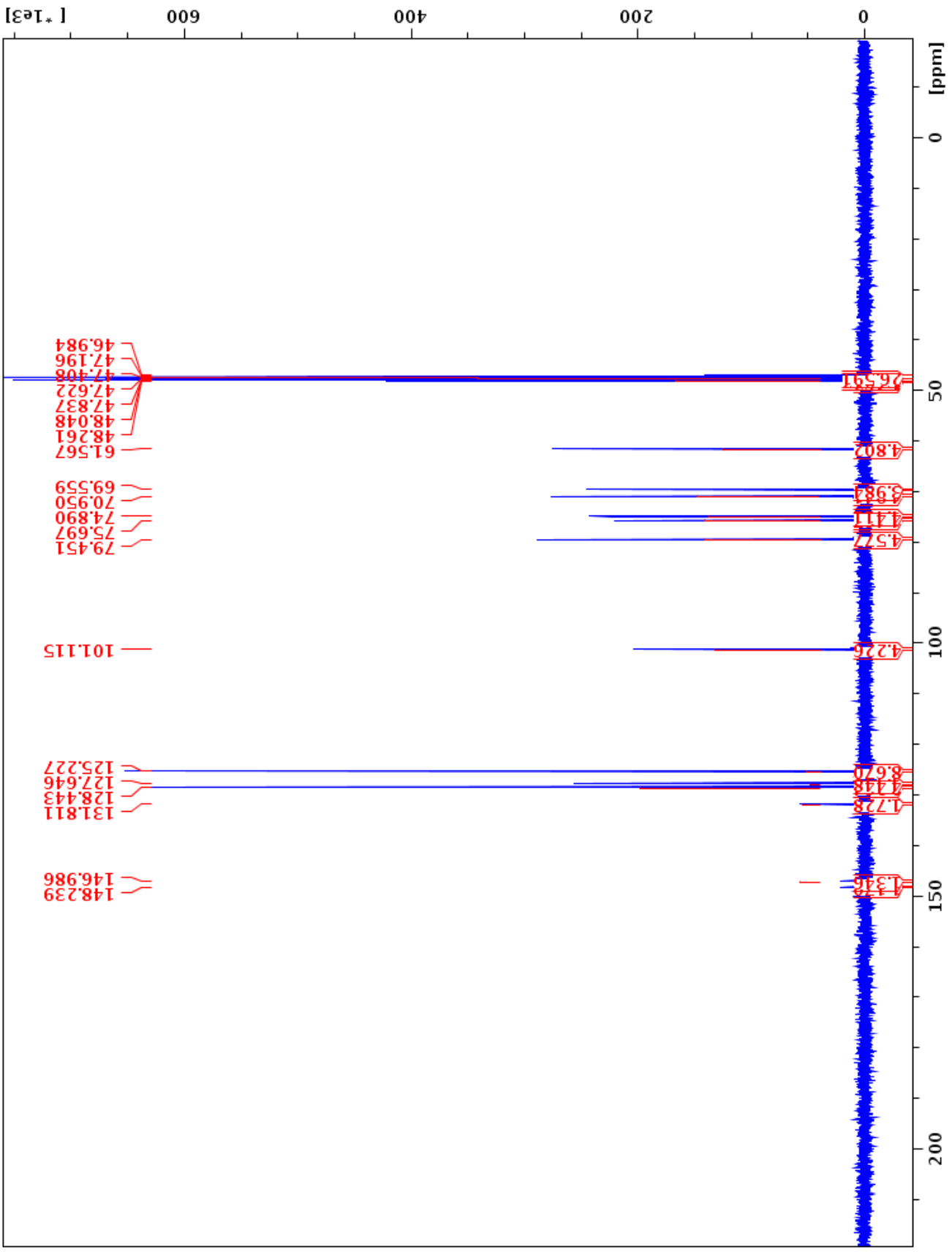
3c: 3-naphth-2-yl-5-(1-deoxy- β-D-galactopyranosyl)isoxazole



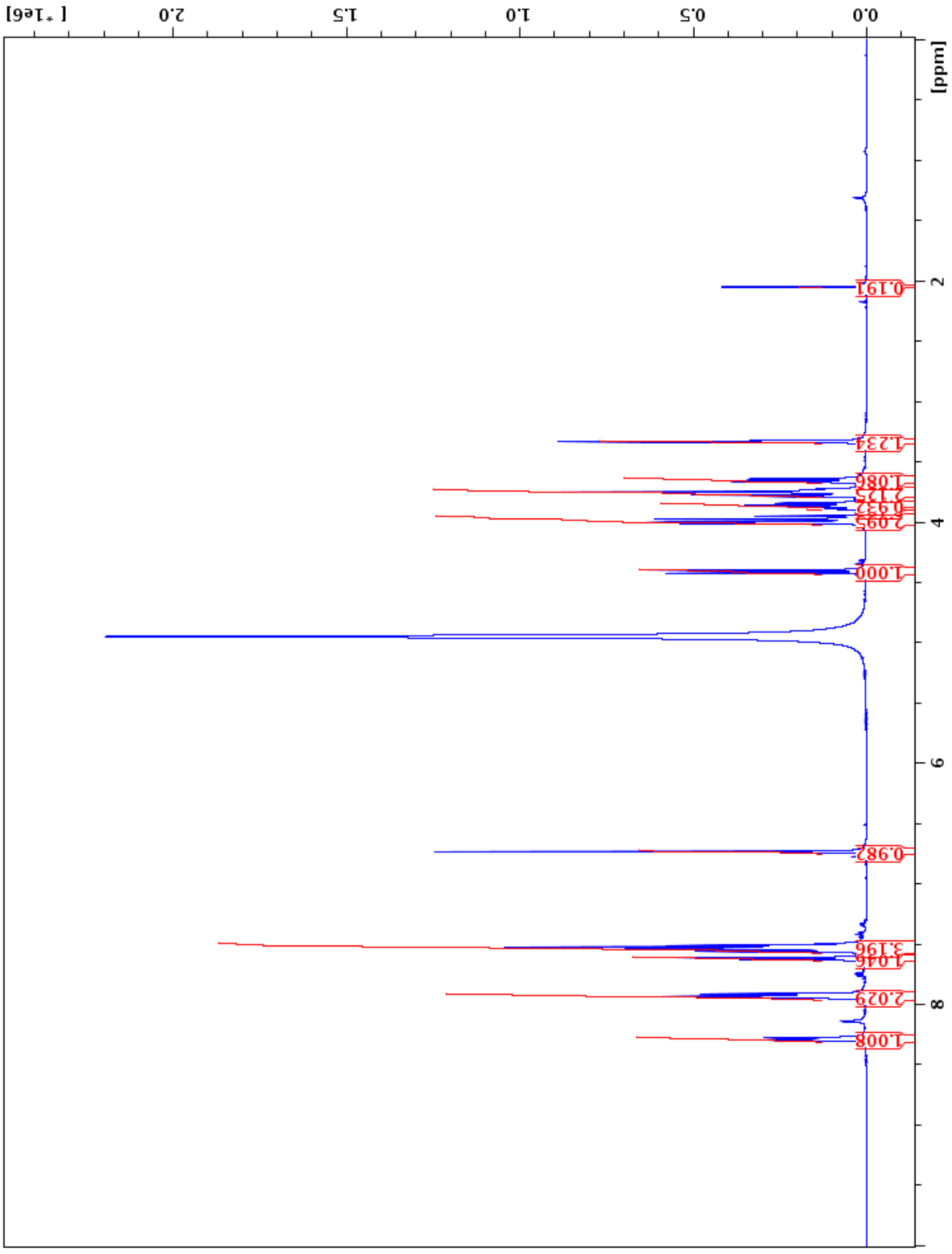
4a: 3-phenyl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole



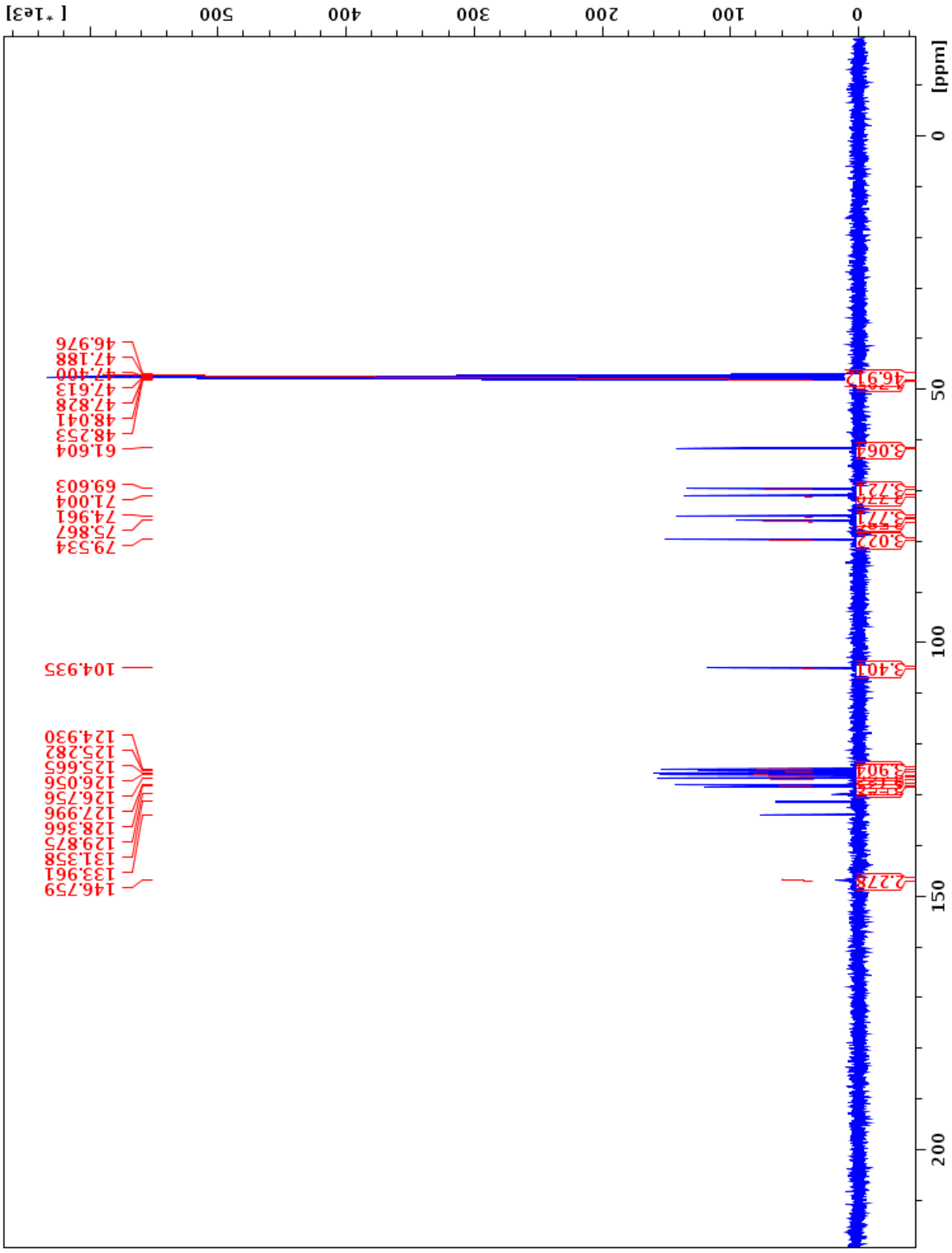
4a: 3-phenyl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole



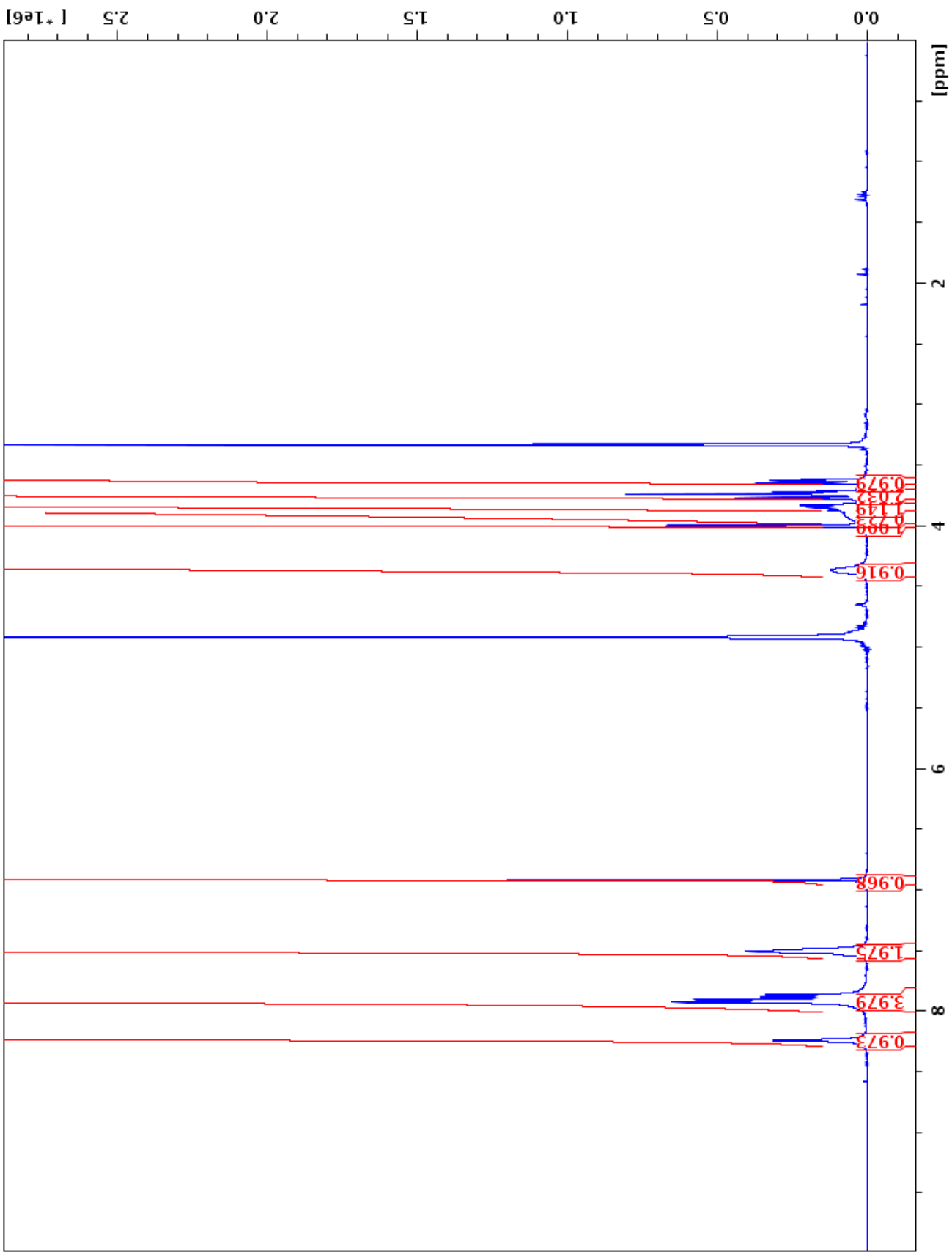
4b: 3-naphth-1-yl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole



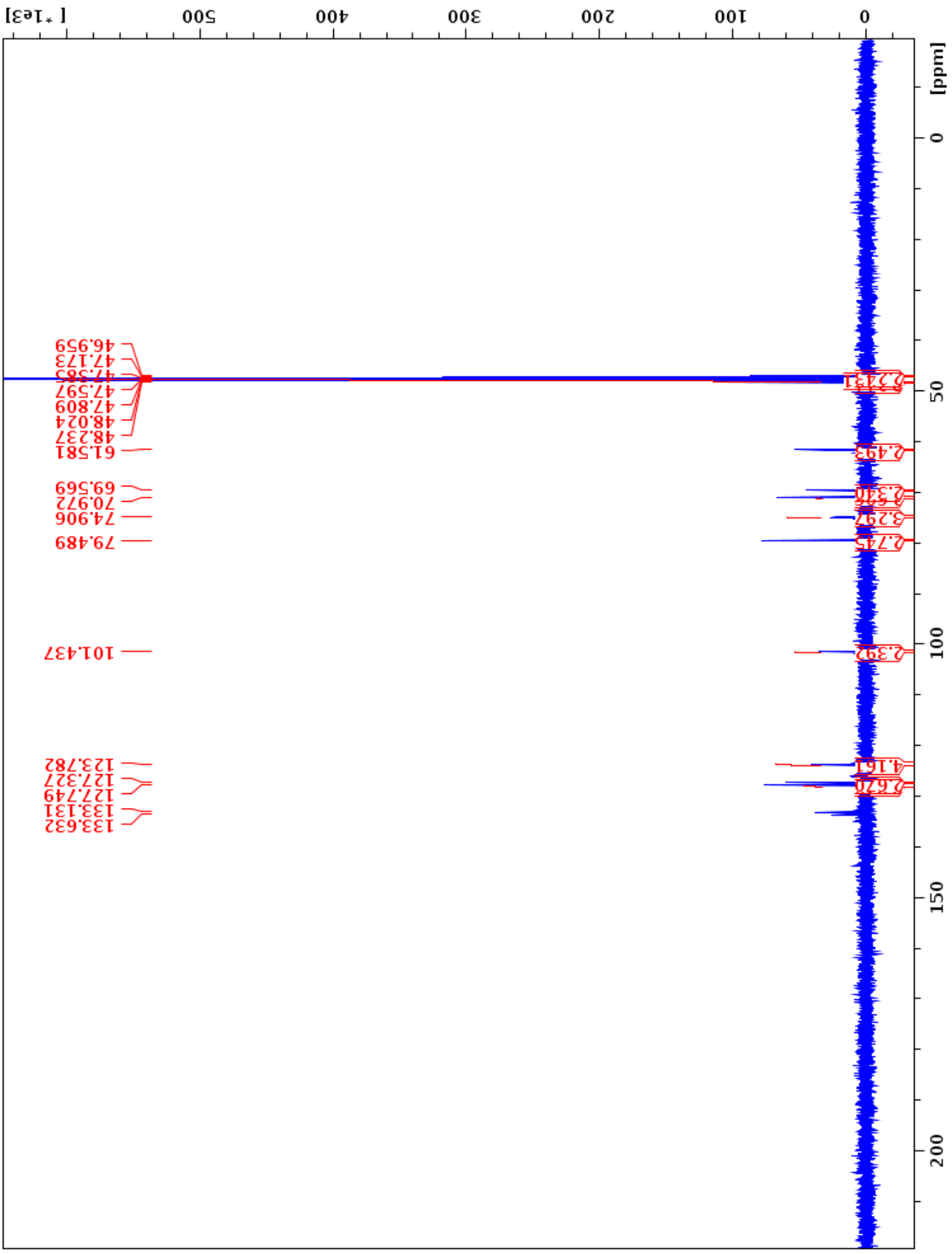
4b: 3-naphth-1-yl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole



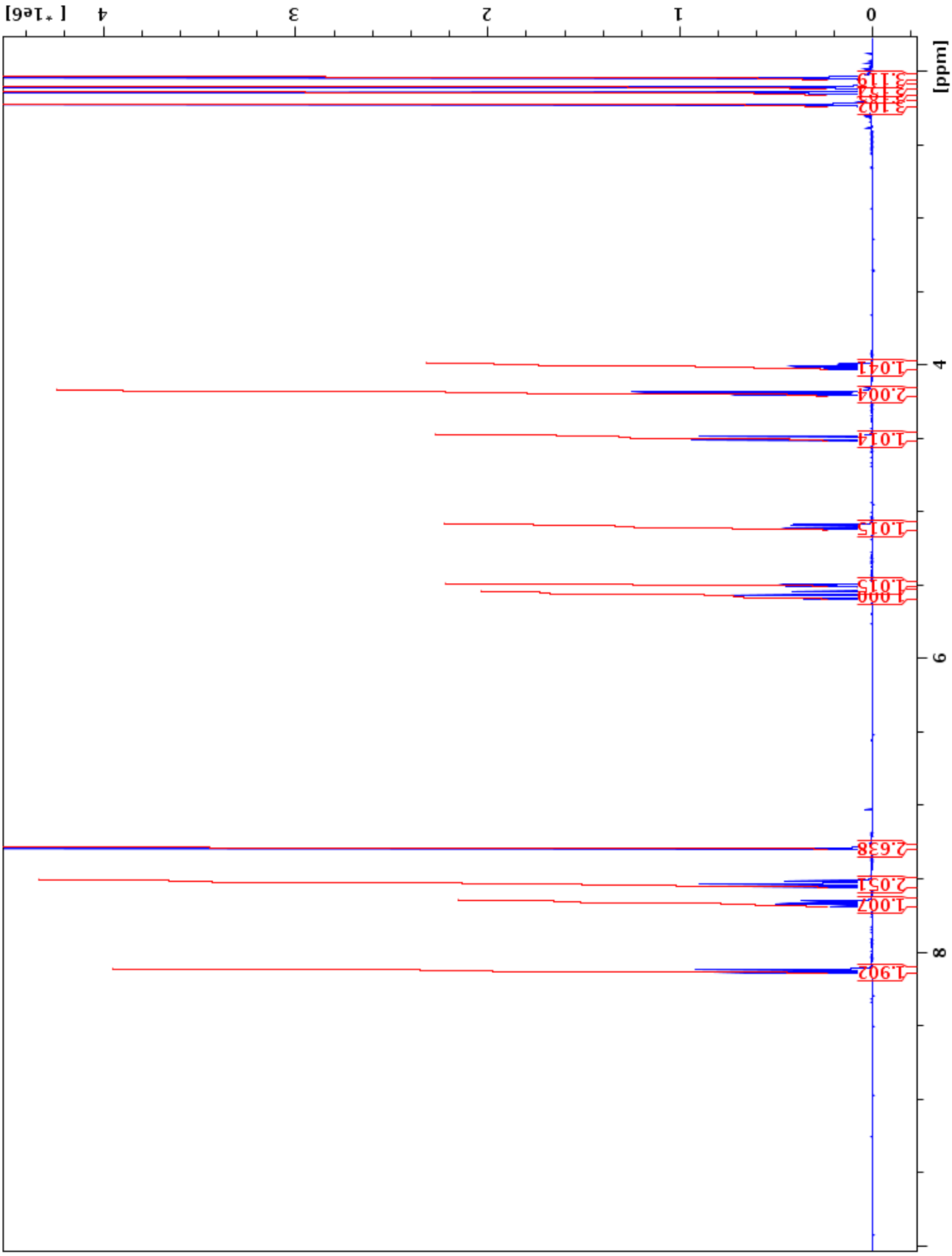
4c: 3-naphth-2-yl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole



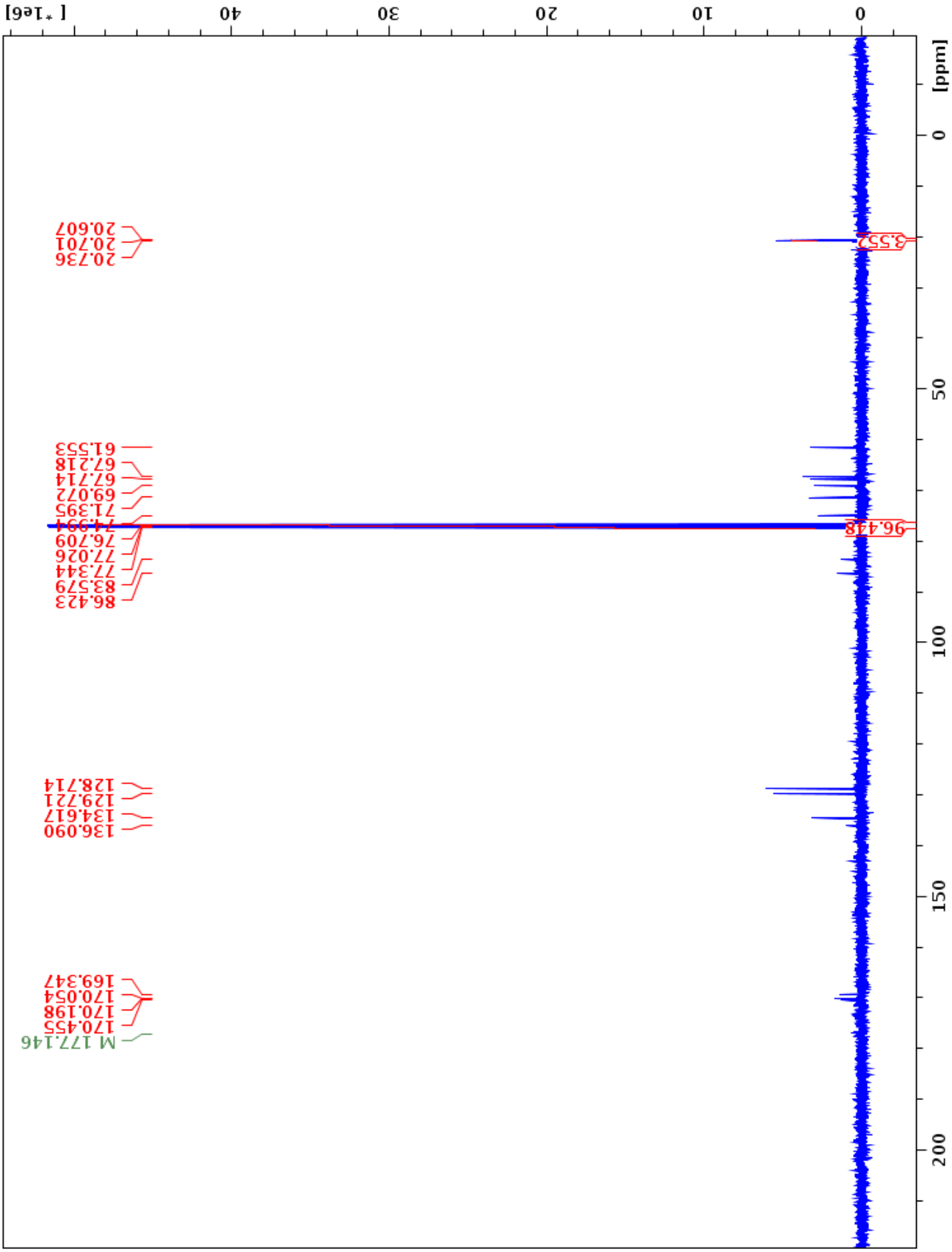
4c: 3-naphth-2-yl-5-(1-deoxy- β-D-galactopyranosyl)-1H-pyrazole



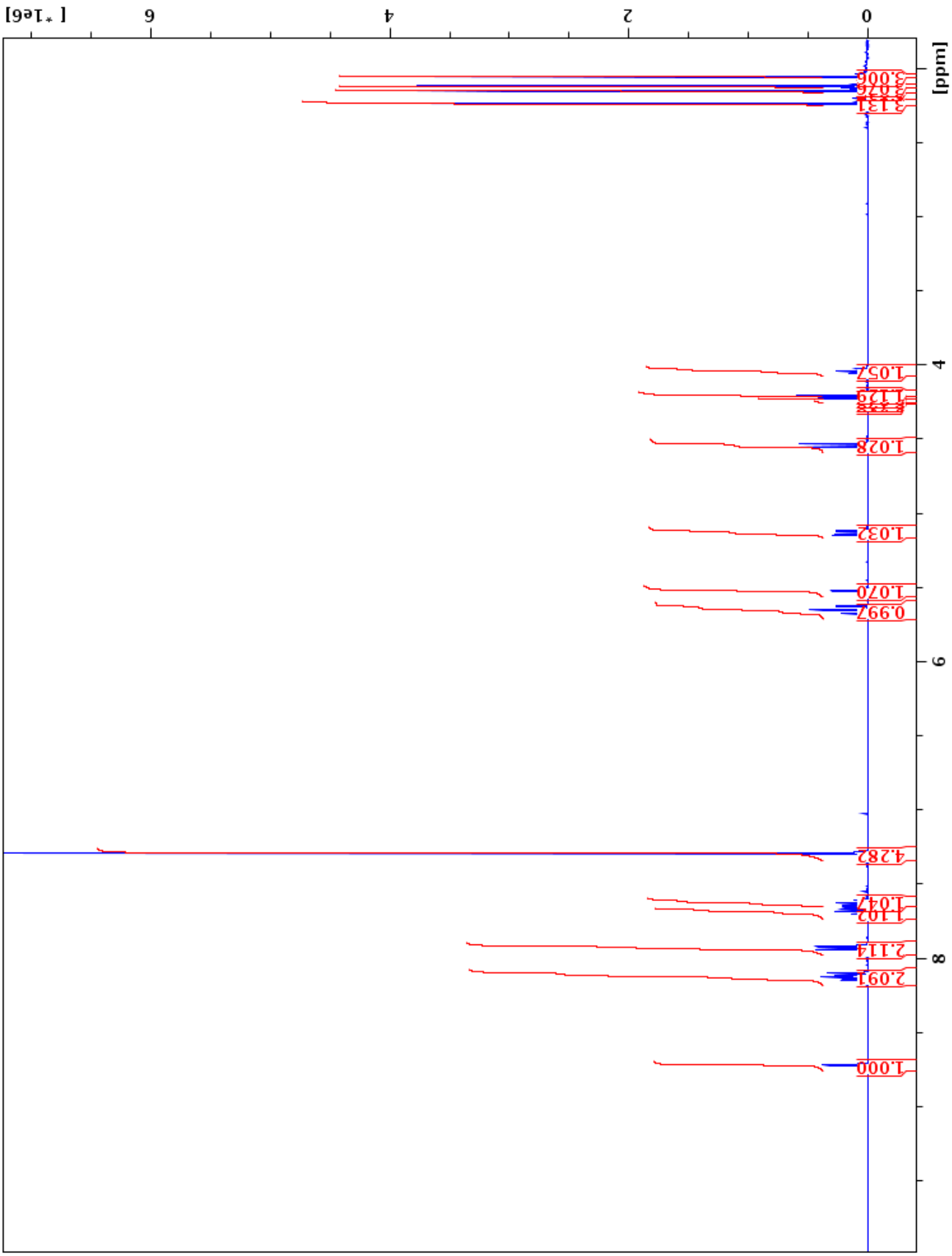
9a: 1-phenyl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one



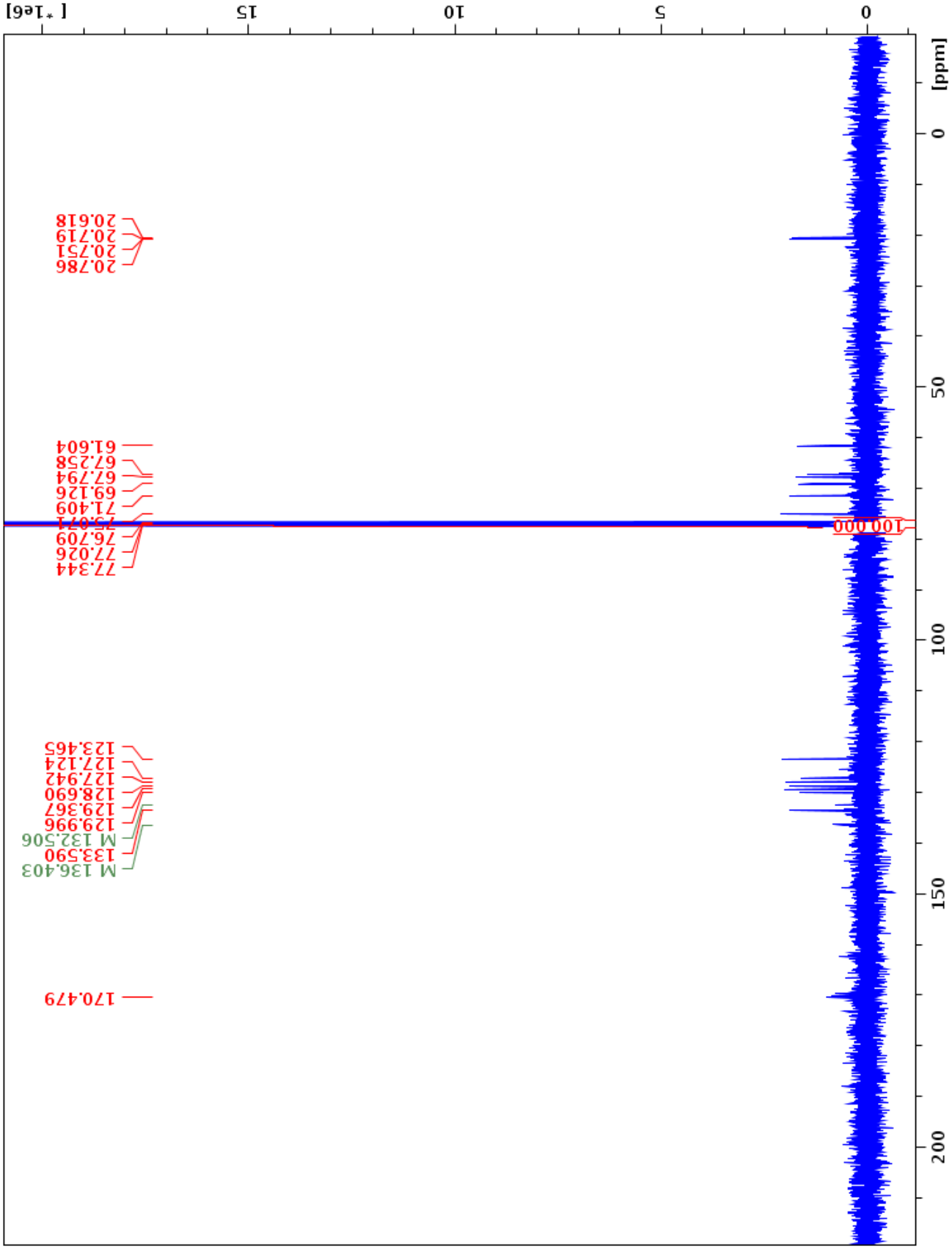
9a: 1-phenyl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one



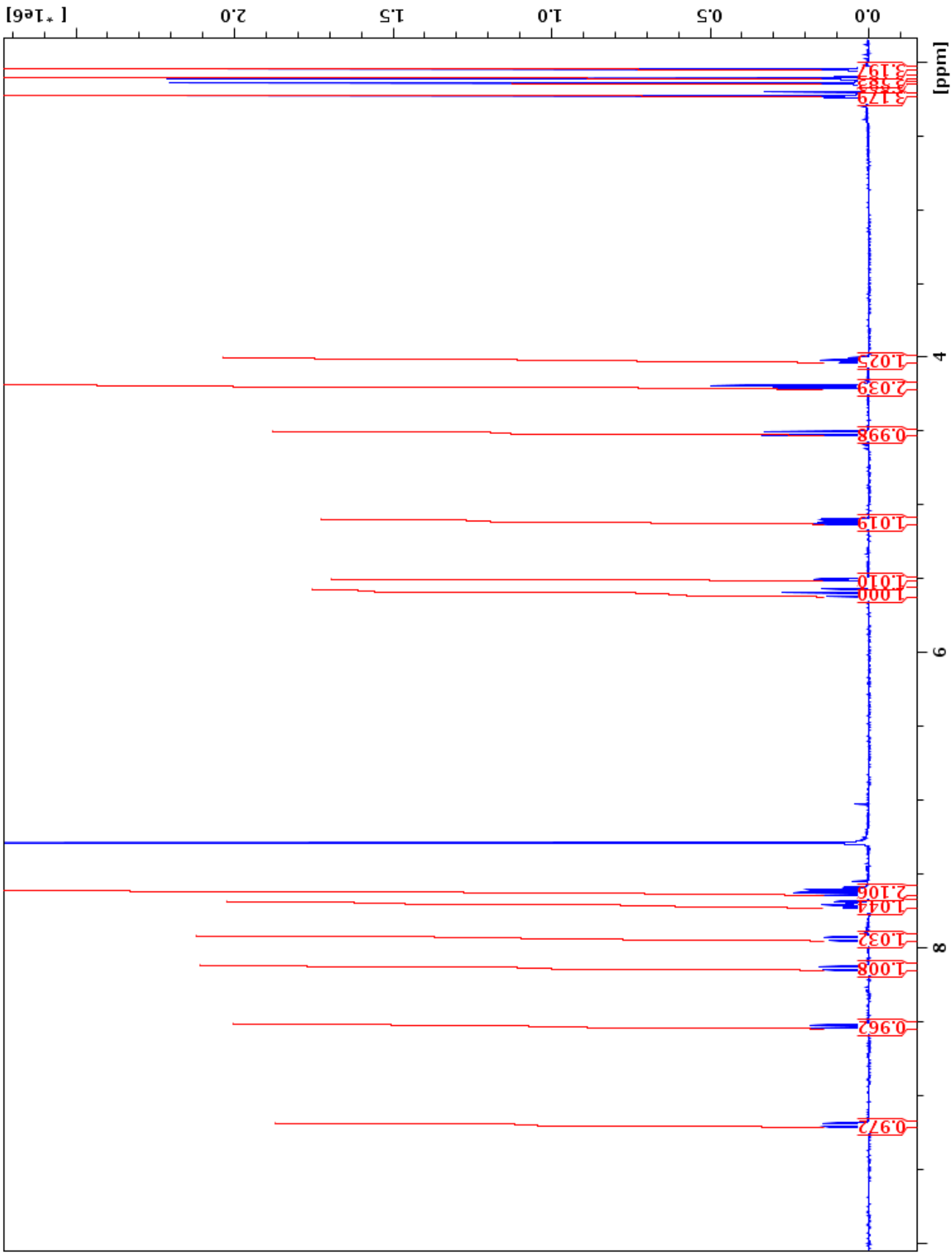
9b: 1-naphth-2-yl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one



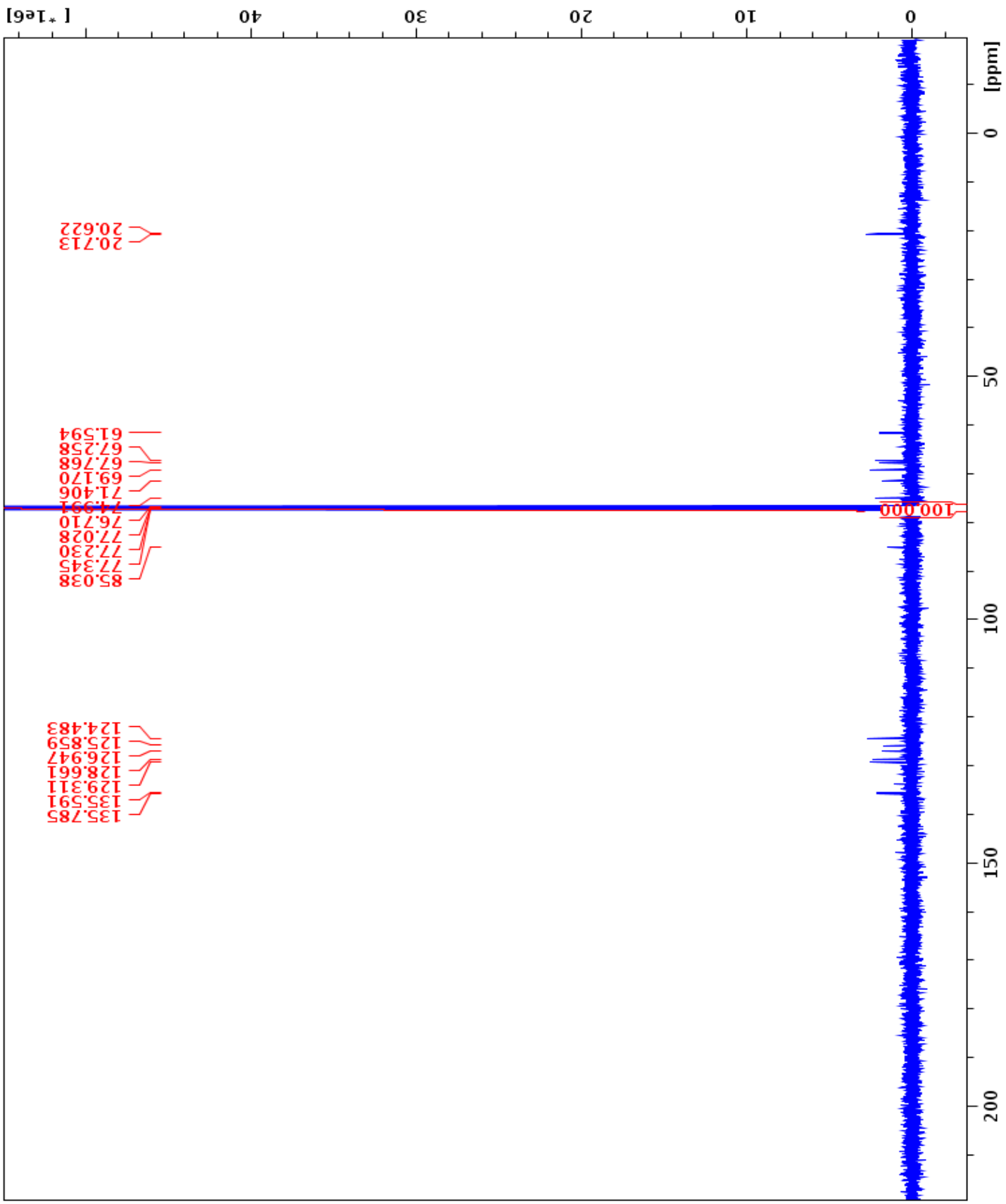
9b: 1-naphth-2-yl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one



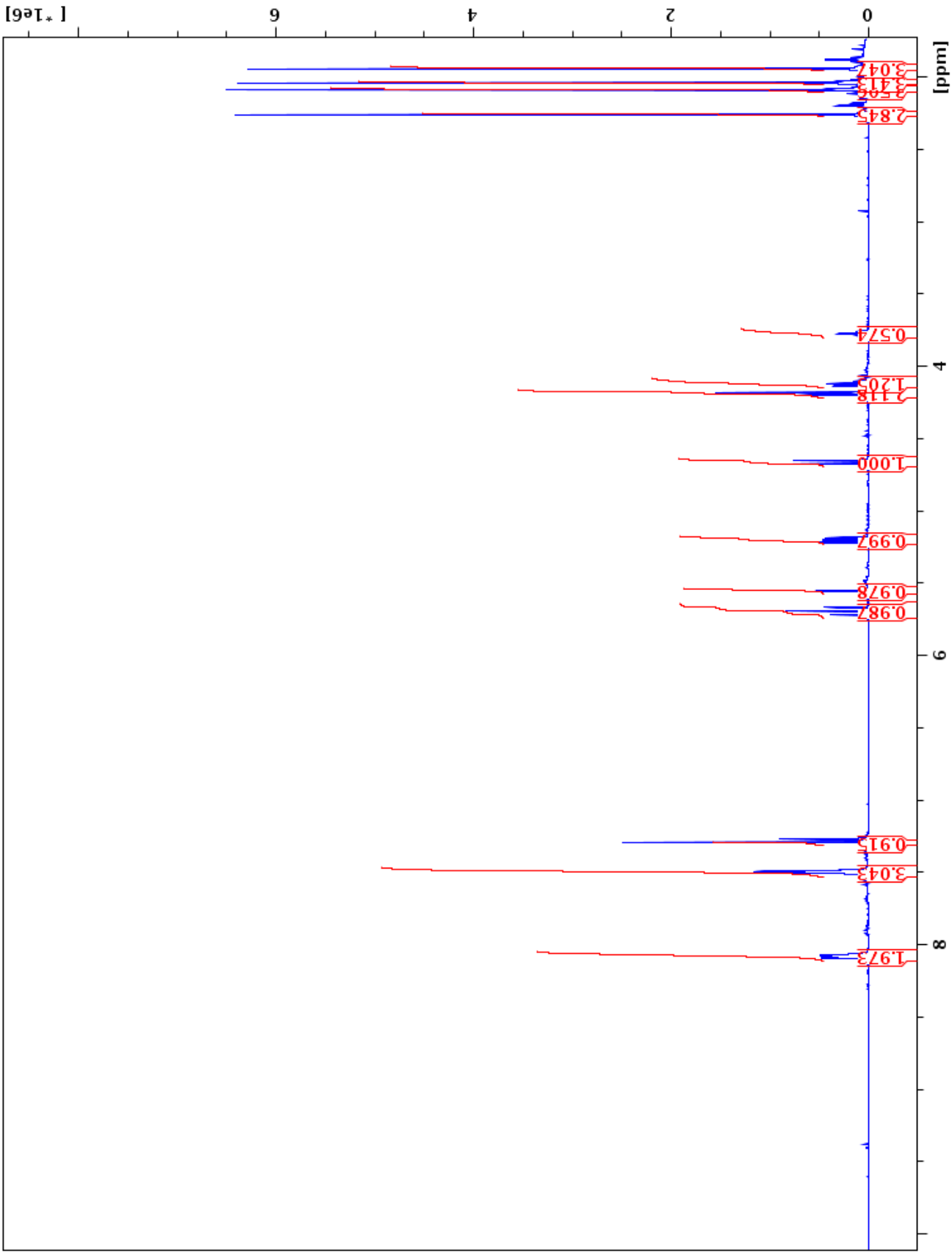
9c: 1-naphth-1-yl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one



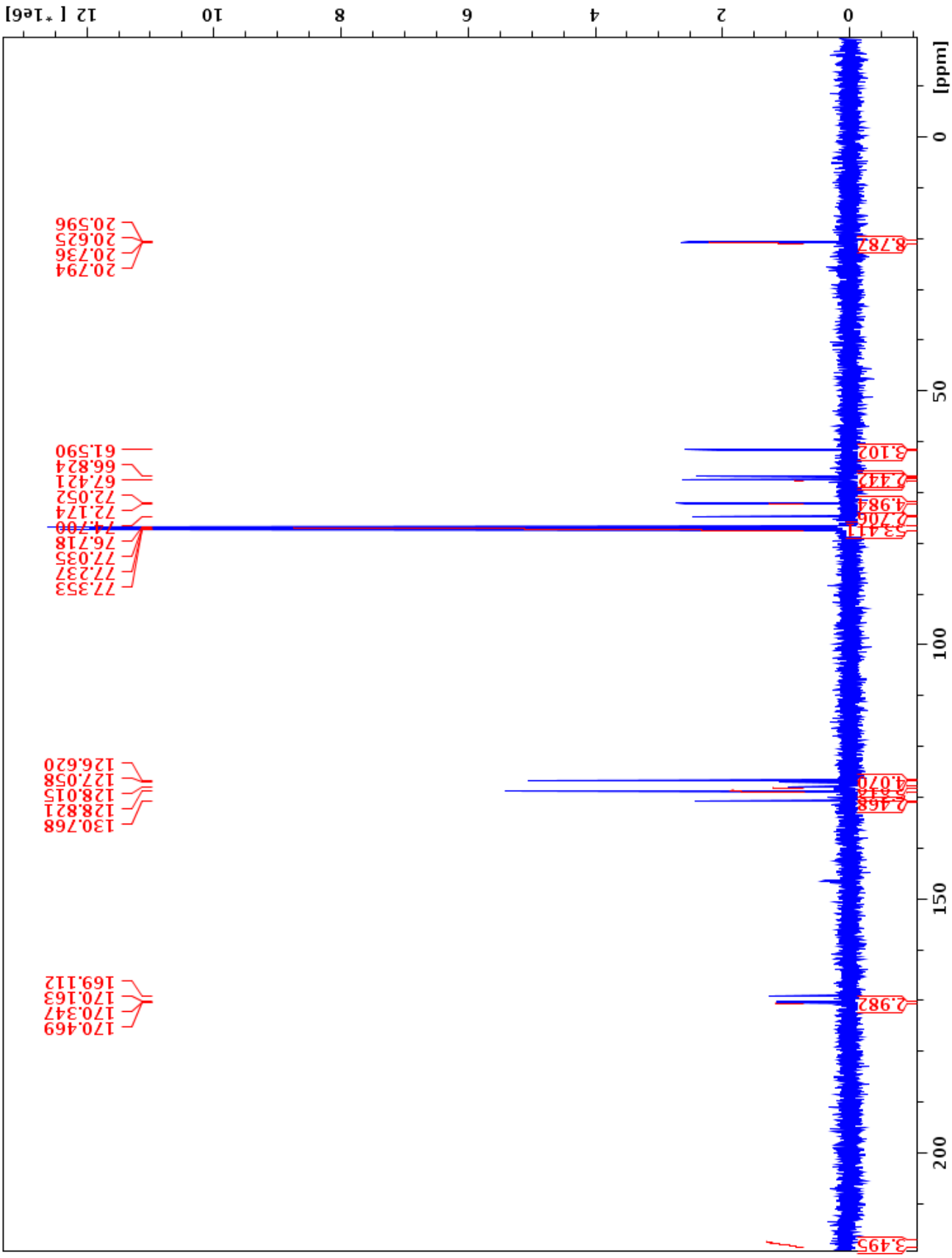
9c: 1-naphth-1-yl-3-(2,3,4,6-tetra-*O*-acetyl-β-D-galactopyranosyl)-prop-2-yn-1-one



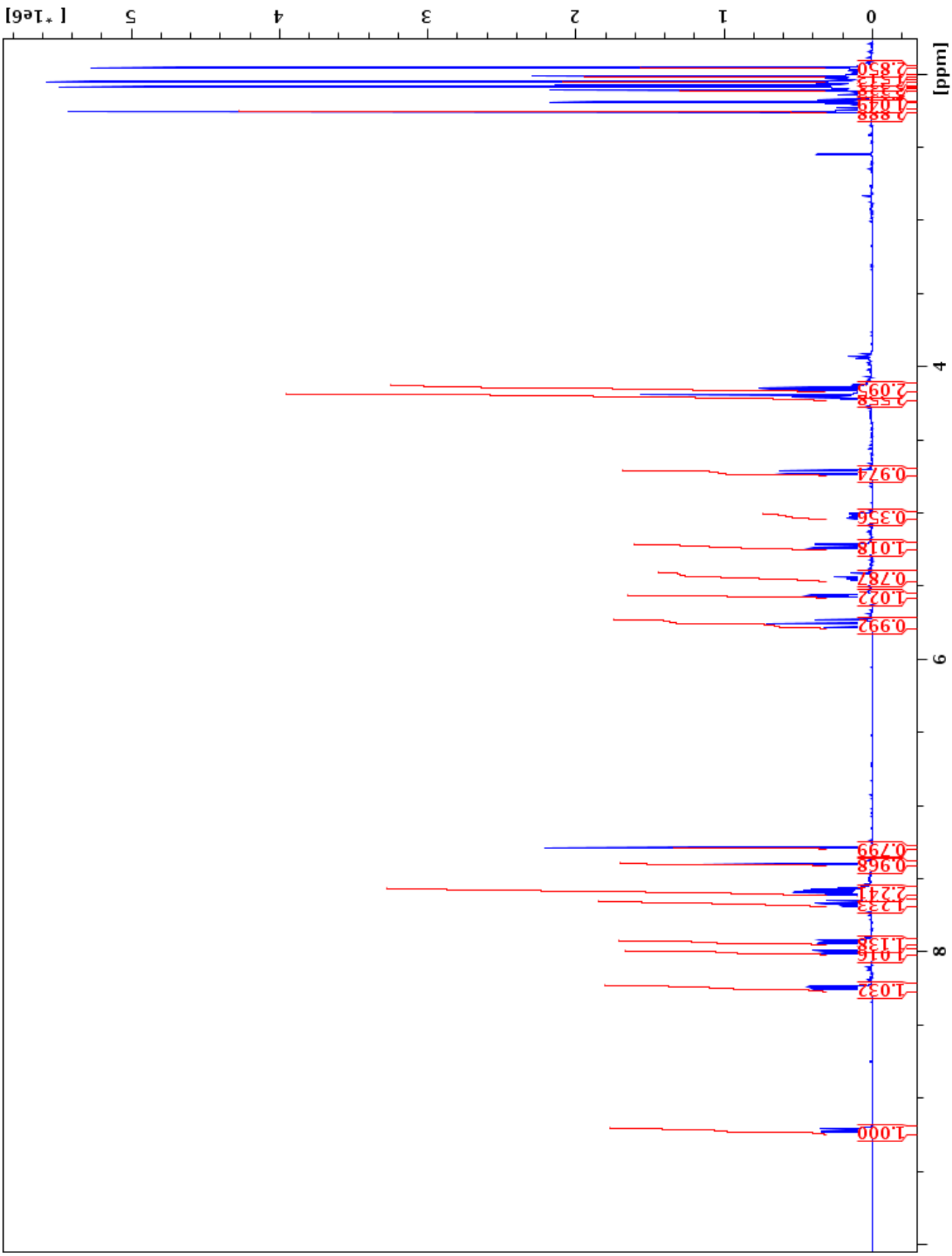
10a: 2-phenyl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



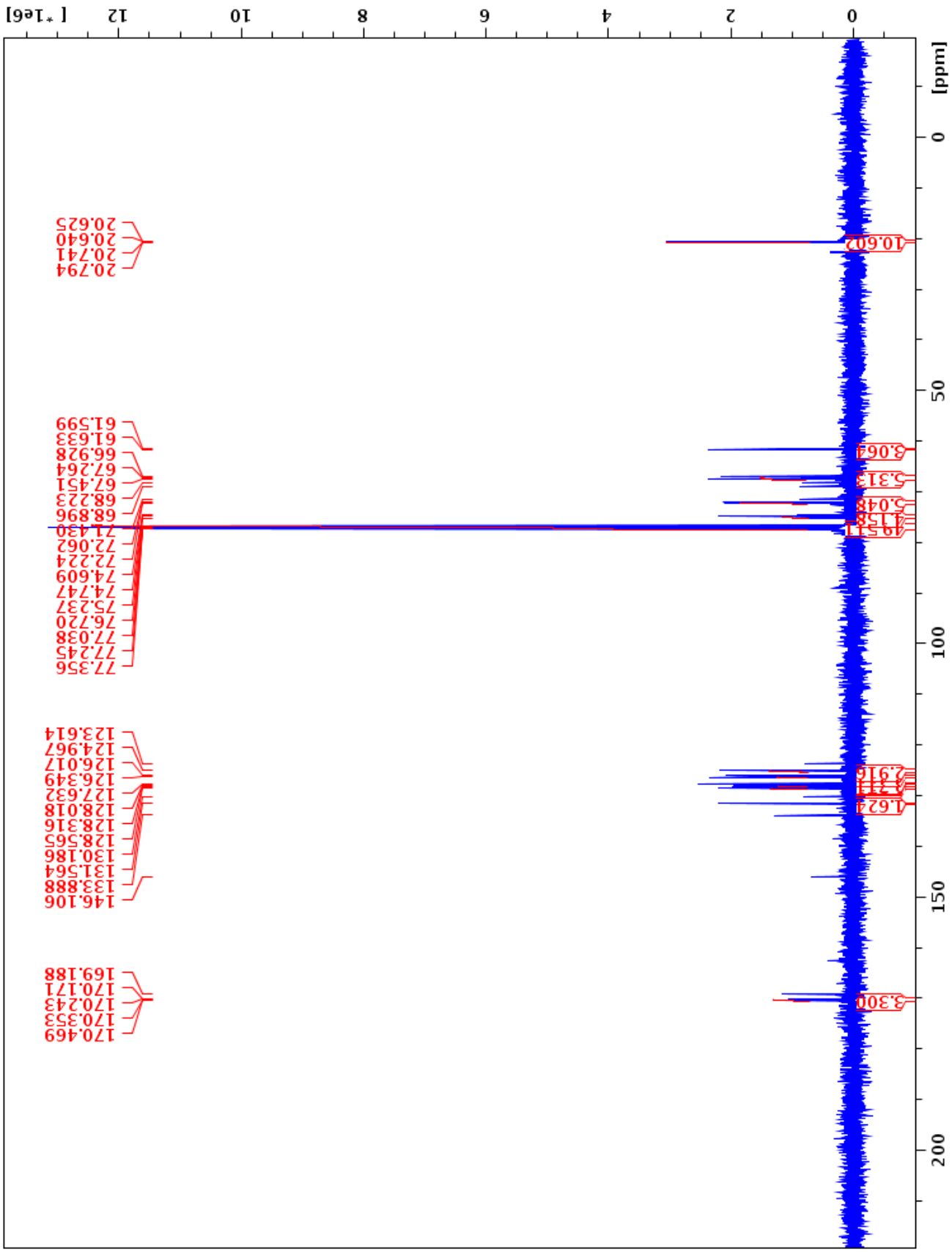
10a: 2-phenyl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



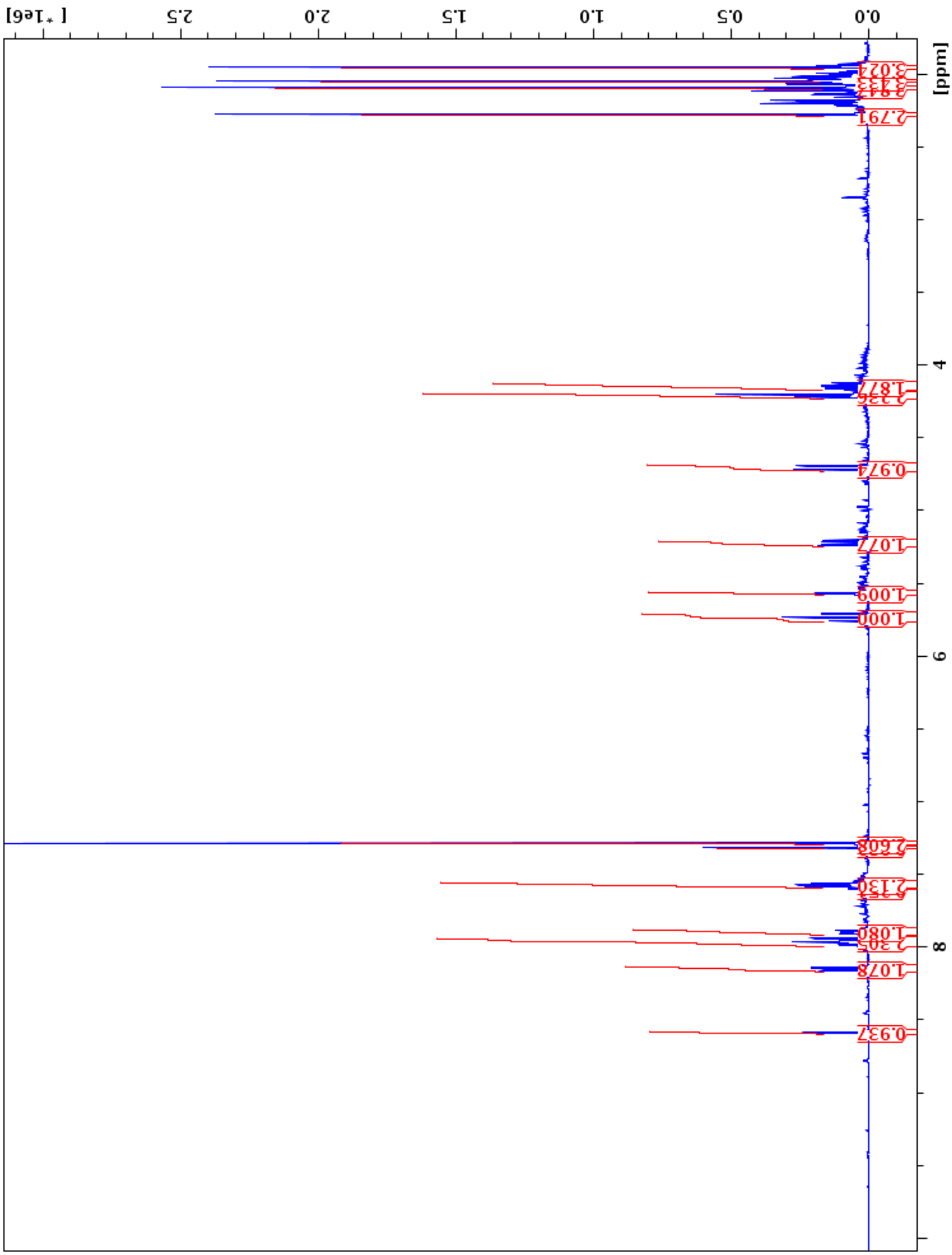
10b: 2-naphth-1-yl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



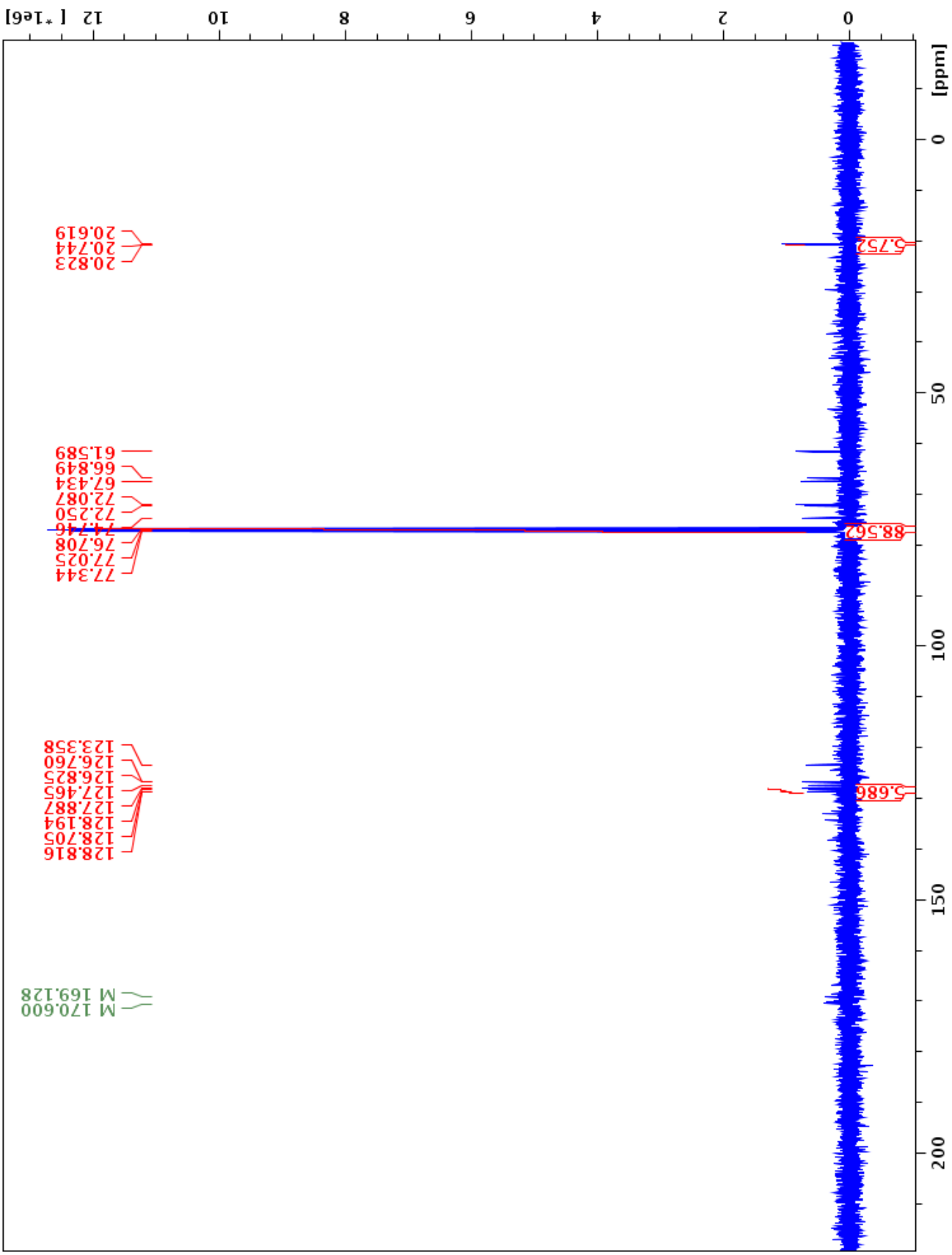
10b: 2-naphth-1-yl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



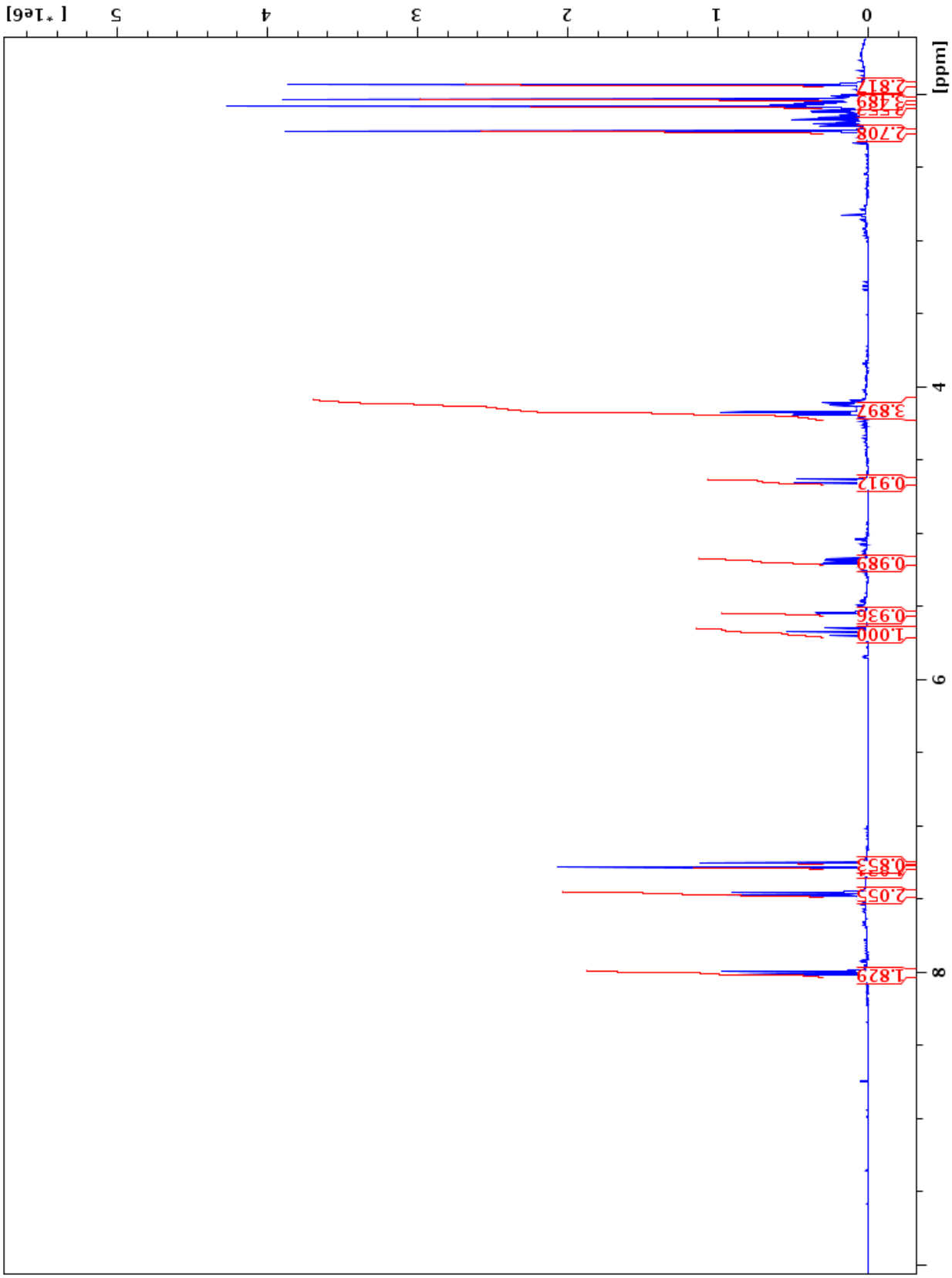
10c: 2-naphth-2-yl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



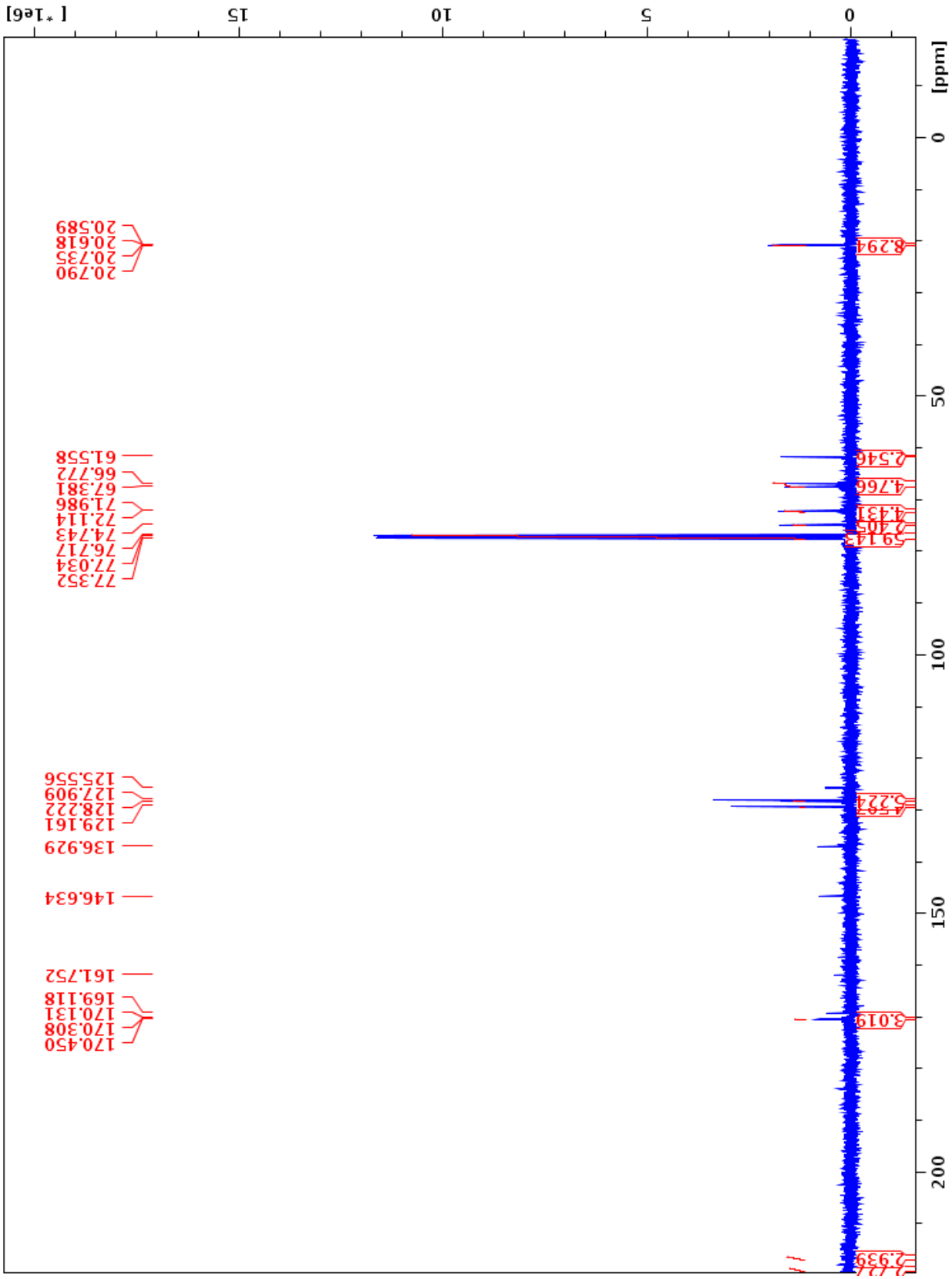
10c: 2-naphth-2-yl-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



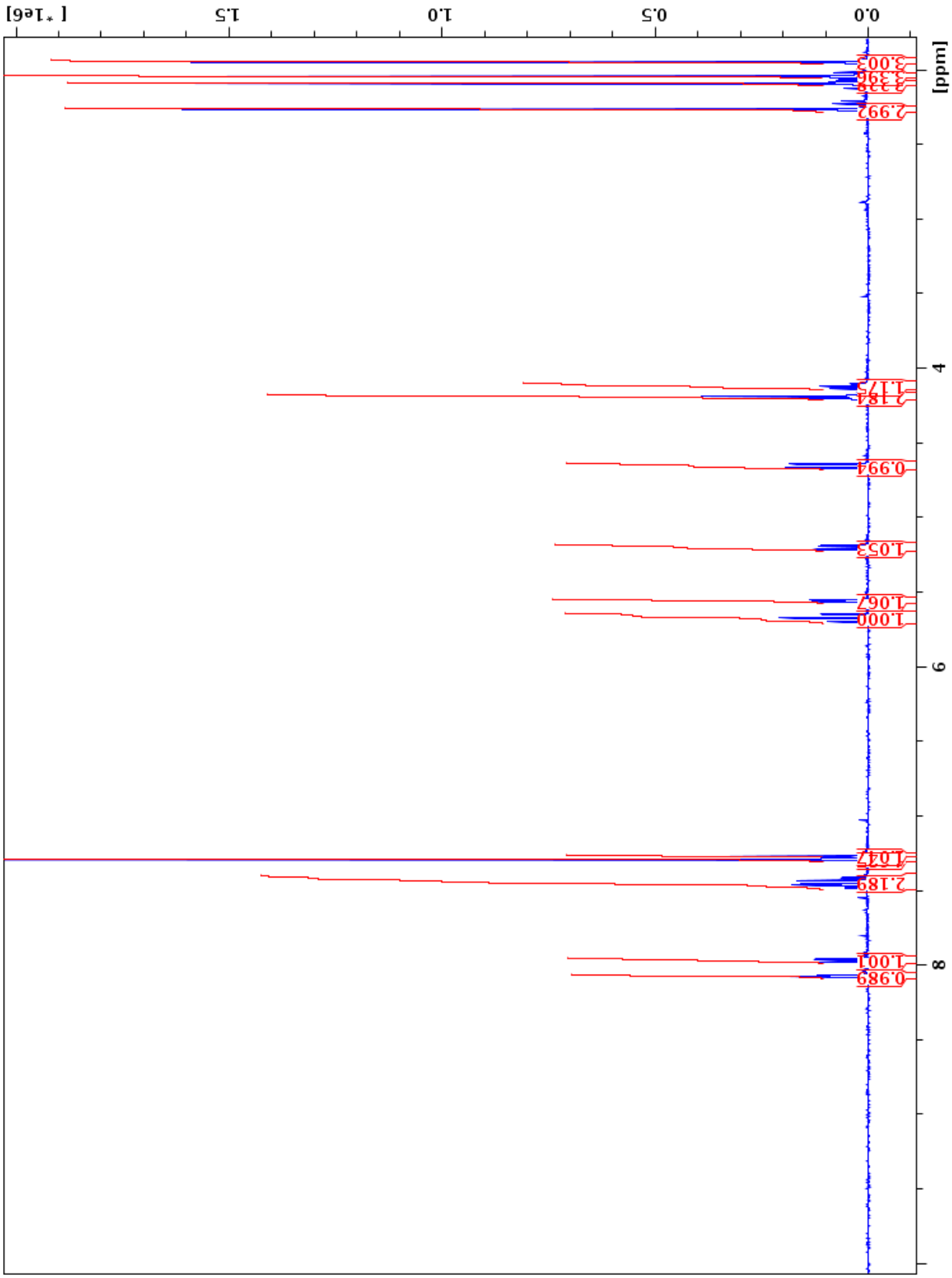
10d: 2-(4-chlorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



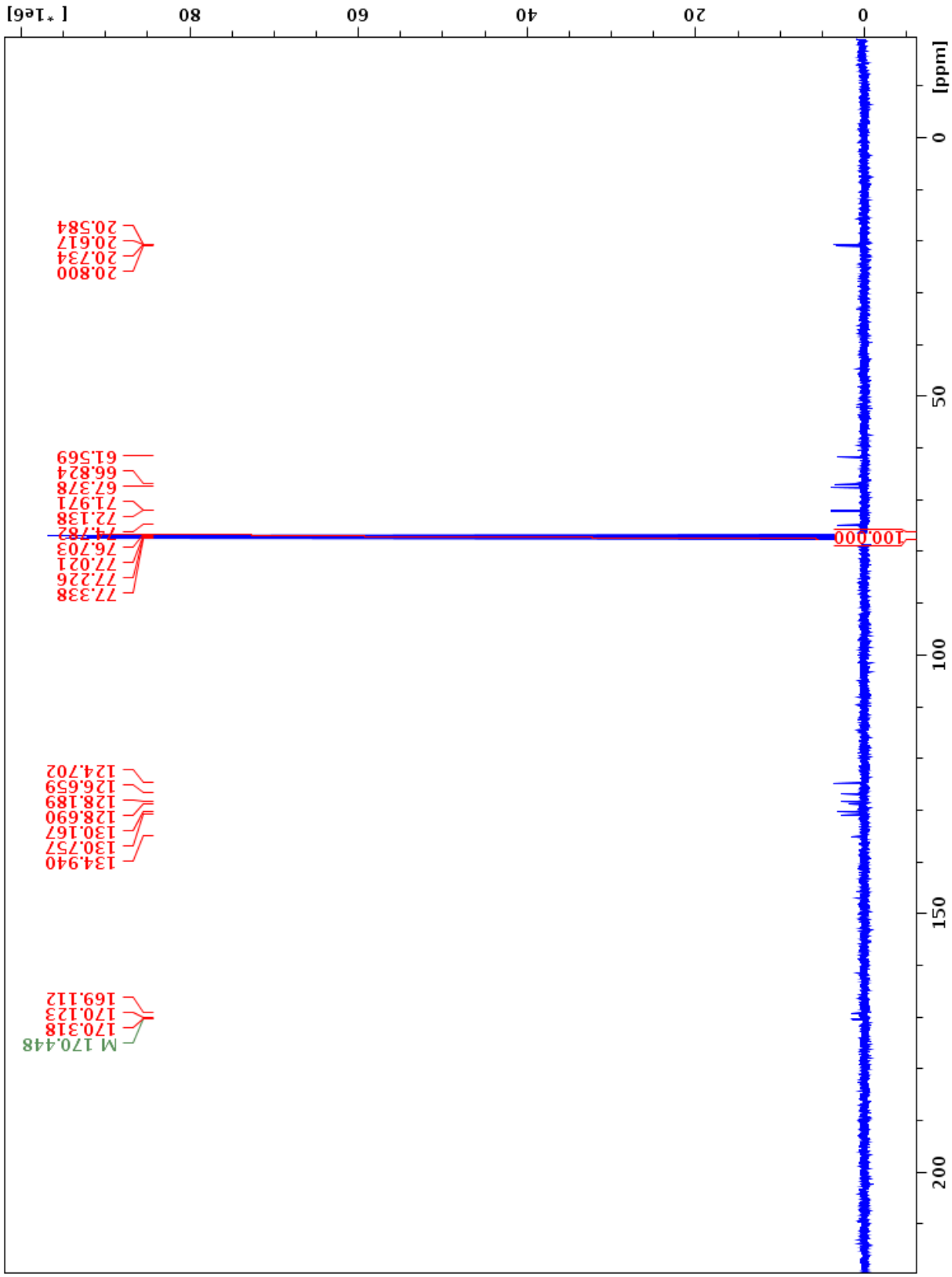
10d: 2-(4-chlorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



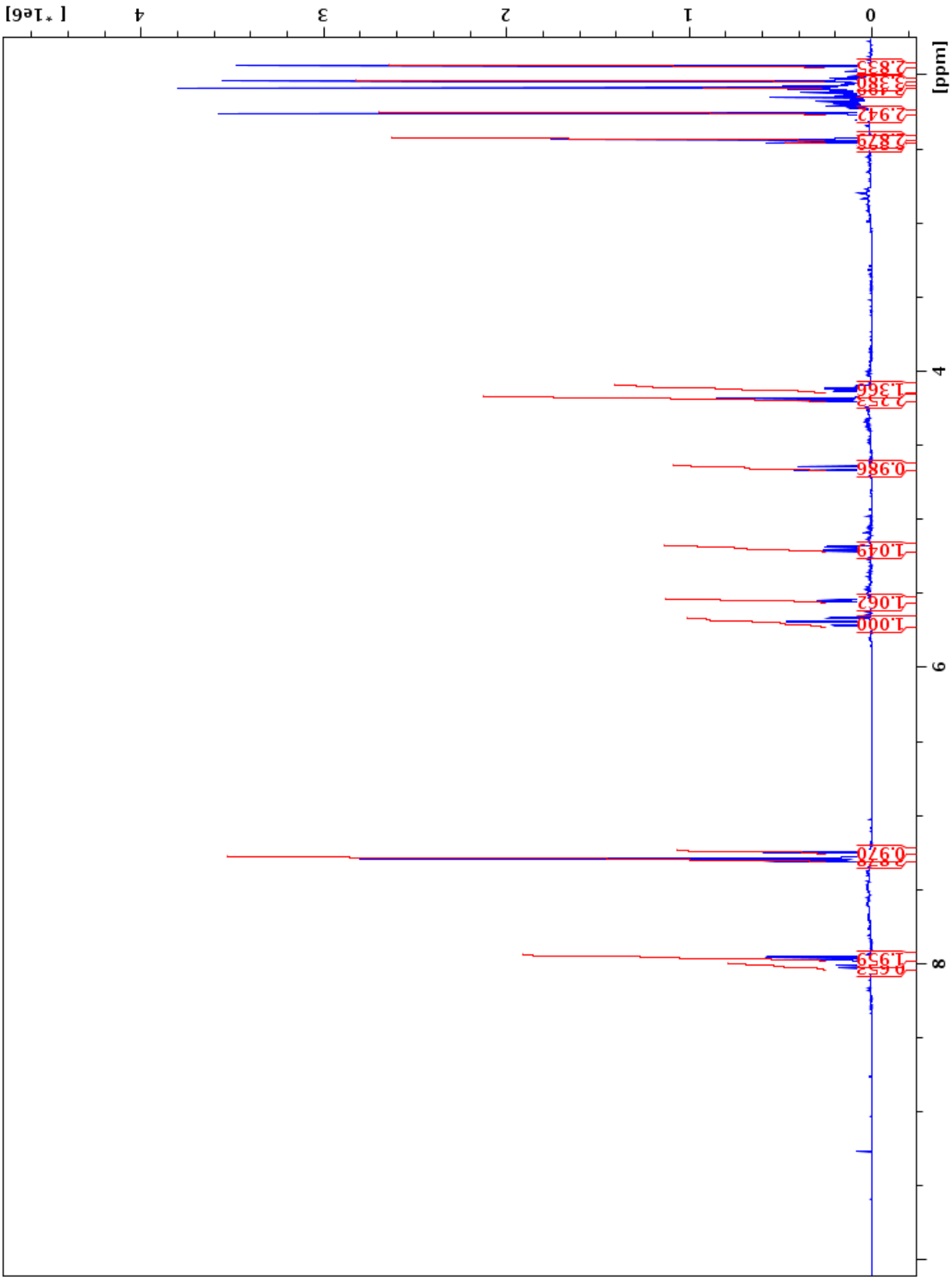
10e: 2-(3-chlorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



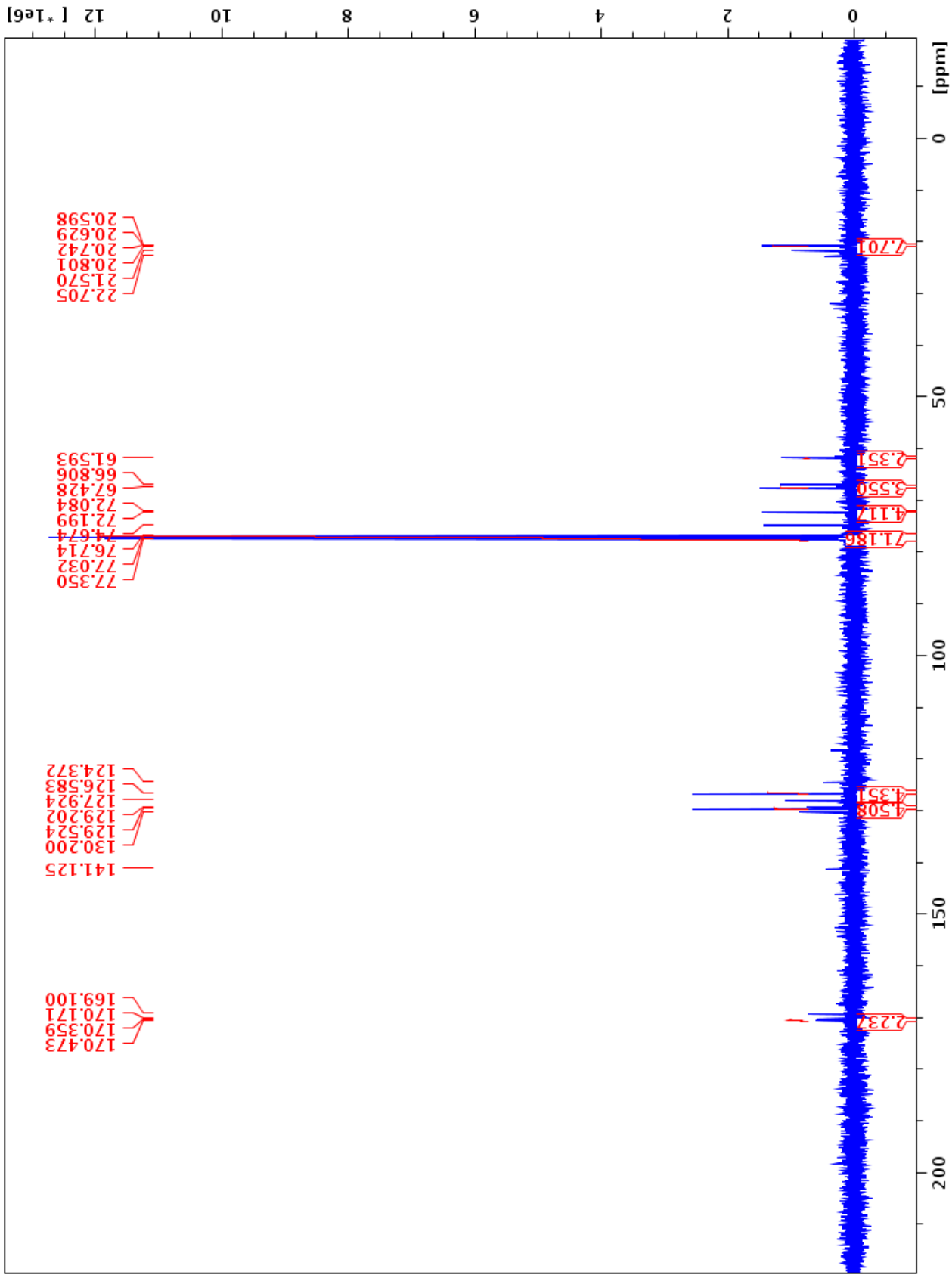
10e: 2-(3-chlorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



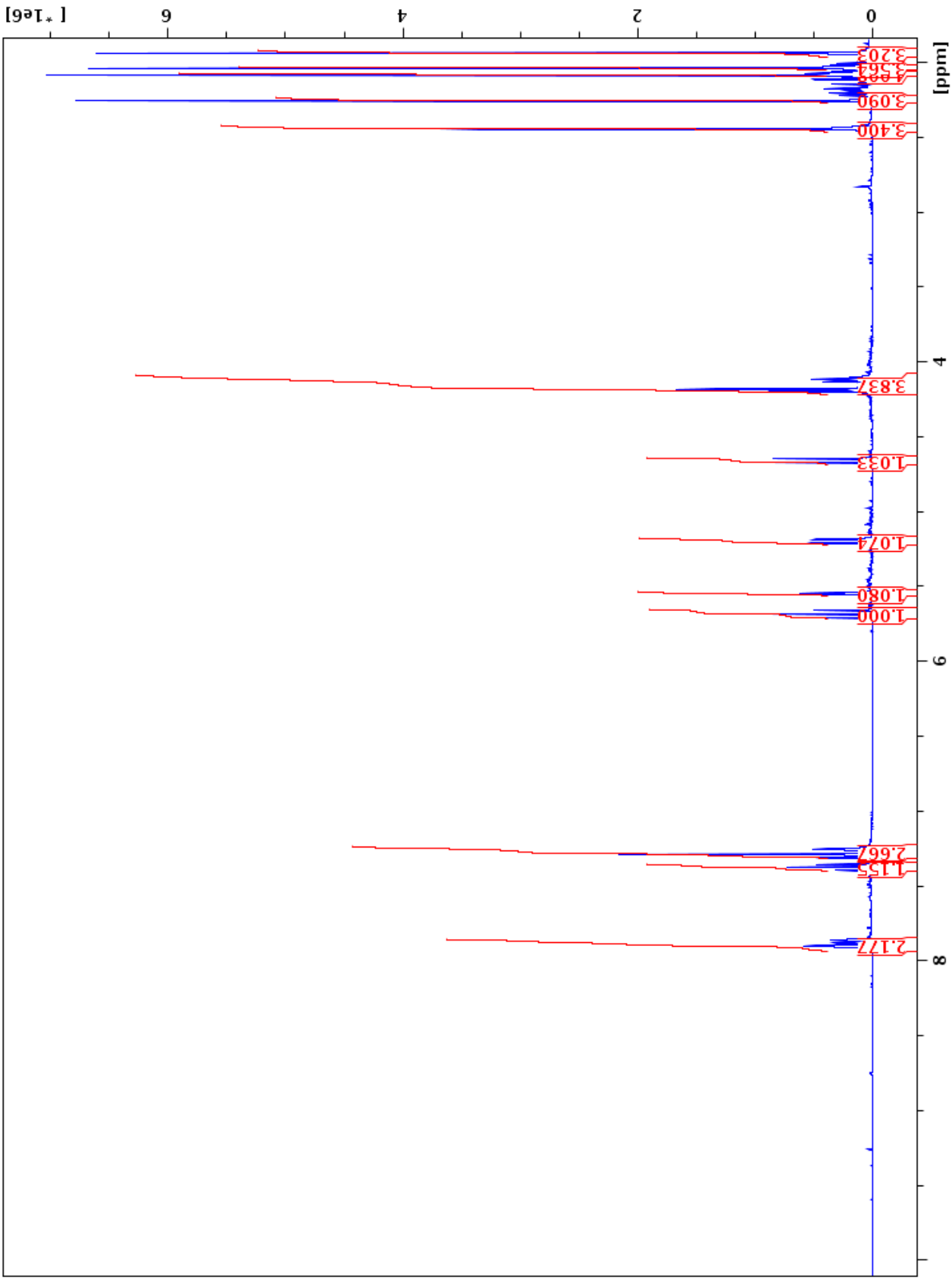
10f: 2-(4-methylphenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



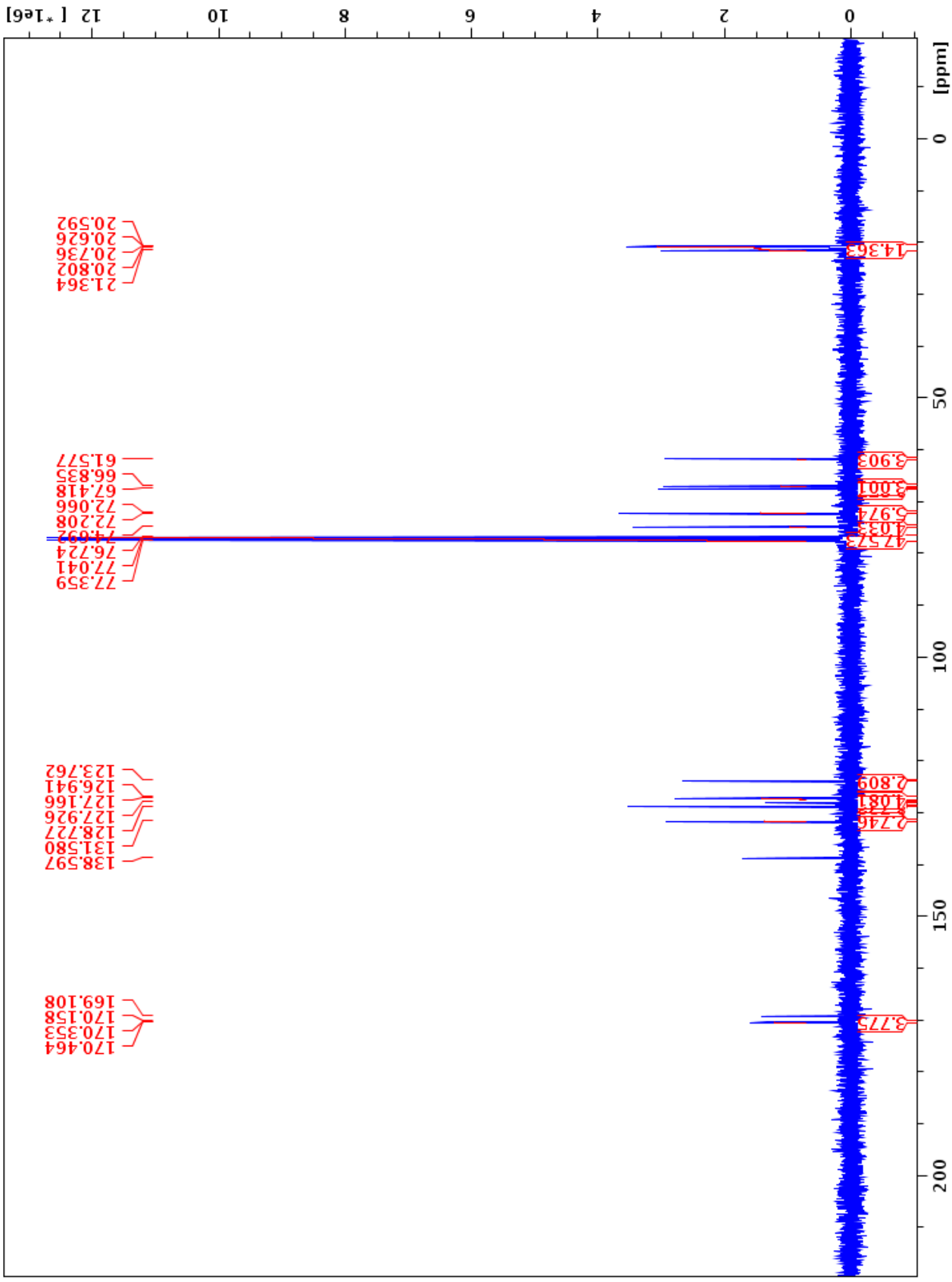
10f: 2-(4-methylphenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



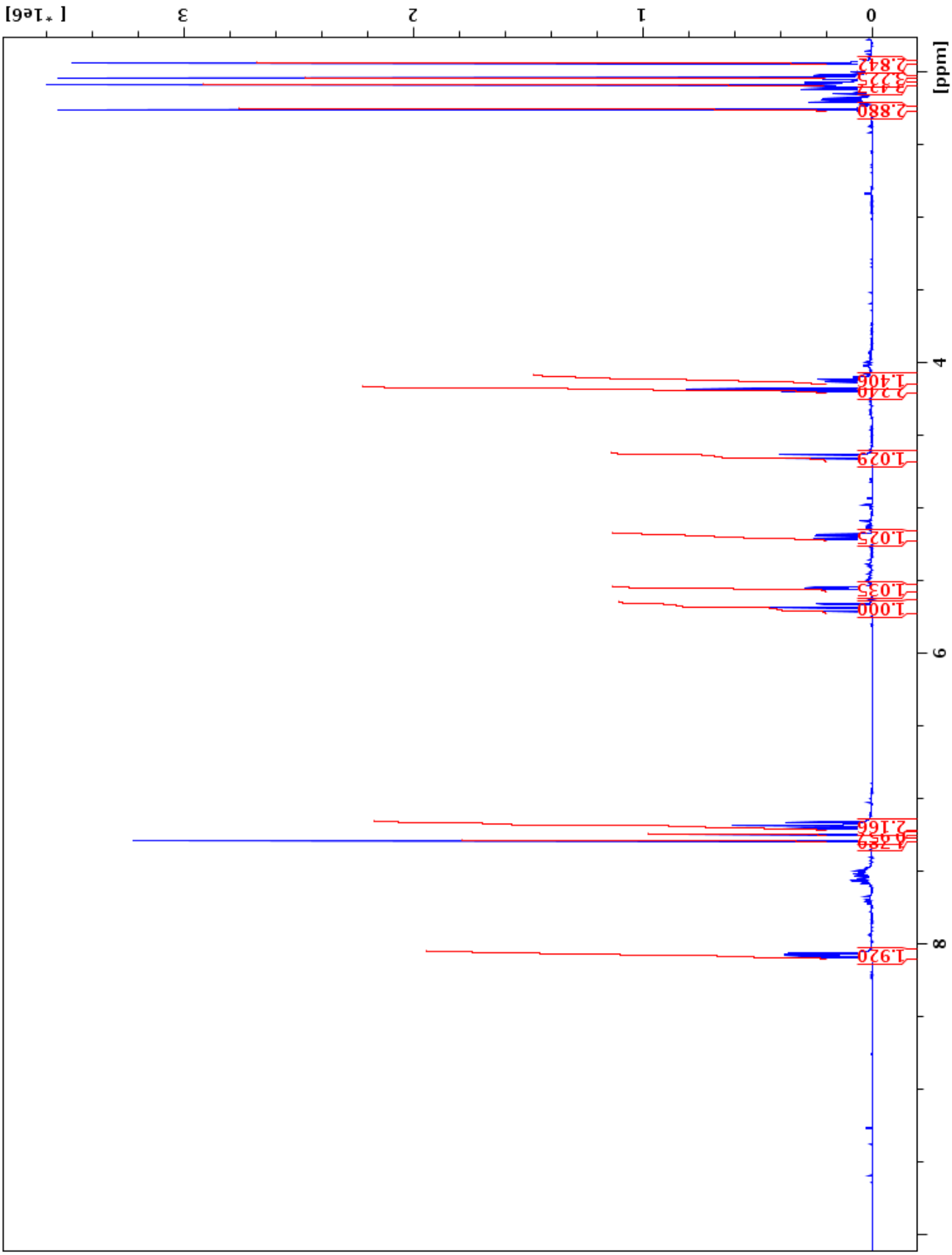
10g: 2-(3-methylphenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



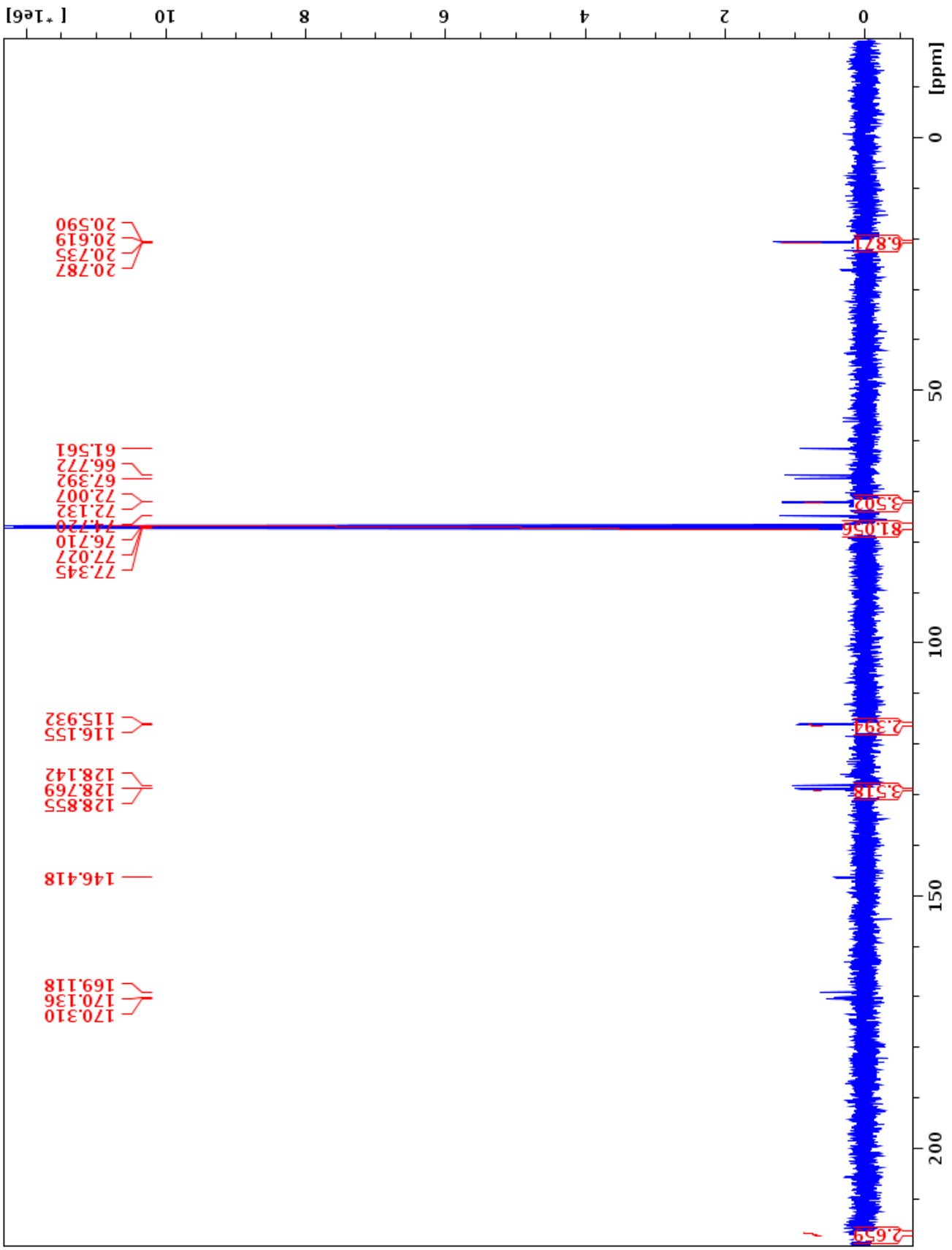
10g: 2-(3-methylphenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



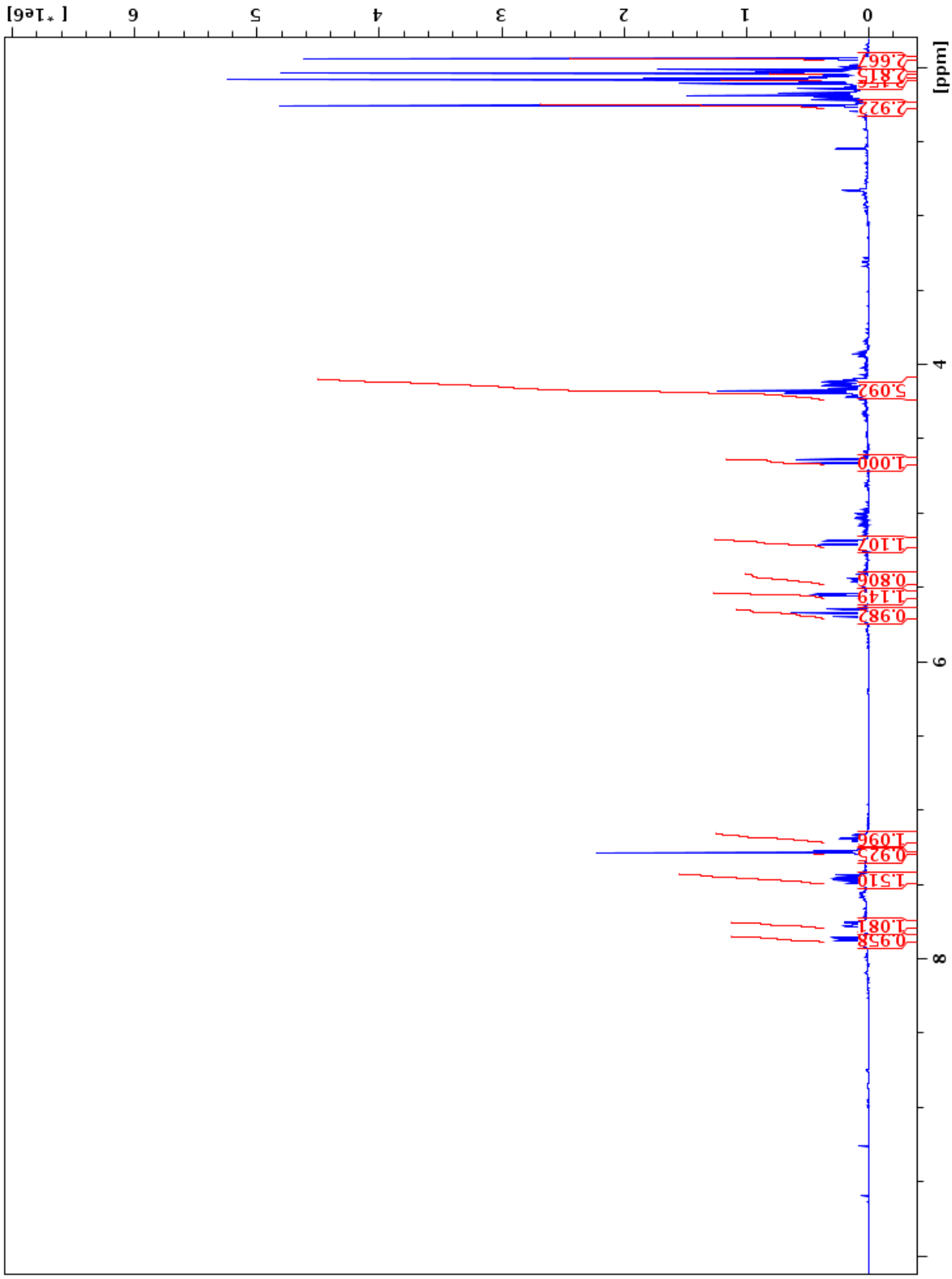
10h: 2-(4-fluorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



10h: 2-(4-fluorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole



10i: 2-(3-fluorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D galactopyranosyl)oxazole



10i: 2-(3-fluorophenyl)-5-(2,3,4,6-tetra-*O*-acetyl-1-deoxy-β-D-galactopyranosyl)oxazole