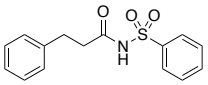
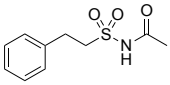
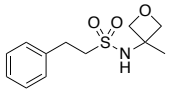
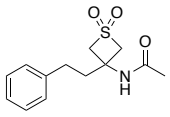
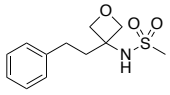
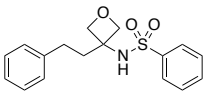
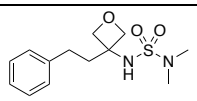
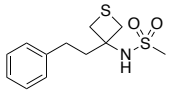
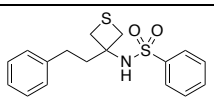
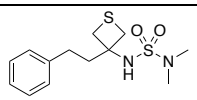
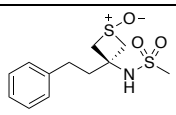
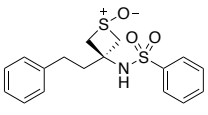
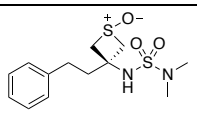
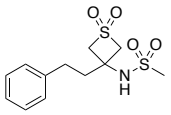
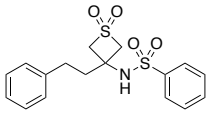
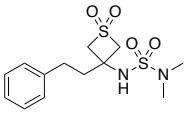
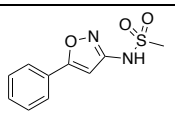
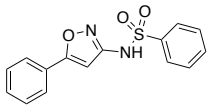
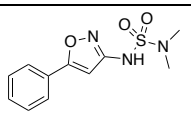
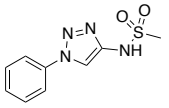
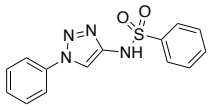
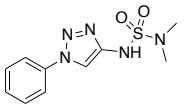
Experimental Properties of Test Compounds

| *Molecule ID* | *Structure* | *mp (°C)*[a] | *% Stability aq. buffer pH 7.4*[b] | *Intrinsic solubility (mol/L)*[c] | *logP*[d] | *logD$_{7.4}$*[e] | *PAMPA* | | | *pK$_d$*[j] |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | *Pe (cm/s)*[g] | *% retention*[h] | *log$_{Papp}$*[i] | |
| **SM25** |  | 107.8–108.5 | 100.0 | 9.97E–4 | 2.67 ±0.01 | -0.09 ±0.01 | 1.64E–6 | –3.05E-2 | –5.79 ±0.12 | 4.49 ±0.04 |
| **SM26** |  | 76.2–78.4 | 91.4 | 8.65E–2 | 1.04 ±0.01 | –0.87 ±0.06 | 1.00E–06 | –5.00E–2 | –6.00 ±0.12 | 4.91 ±0.01 |
| **SM27** |  | ND[§] | 100.0 | 8.71E–2 | ‡ | 1.56 ±0.11[†] | 6.79E–6 | –3.20E–2 | –5.17 ±0.10 | 10.45 ±0.01 |
| **SM28** |  | 135.3–136.8 | 94.5 | 1.62E–3 | ‡ | 1.18 ±0.08[†] | 2.11E–6 | -1.20E-2 | –5.68 ±0.11 | >12 |
| **SM29** |  | 71.4–71.9 | 100.0 | 2.65E–2 | 1.61 ±0.03 | 1.61 ±0.11 | 8.44E–6 | 0.157 | –5.1 ±0.10 | 10.05 ±0.01 |
| **SM30** |  | 105.8–107.2 | 94.1 | 6.38E–4 | ‡ | 2.76 ±0.19[†] | 7.06E–6 | 0.260 | –5.2 ±0.10 | 10.29 ±0.12 |
| **SM31** |  | ND | 93.7 | 3.47E–2 | ‡ | 1.96 ±0.14[†] | 1.02E–5 | 5.89E–2 | –4.99 ±0.10 | 11.02 ±0.01 |
| **SM32** |  | 115.2–116.0 | 91.5 | 1.43E–3 | ‡ | 2.44 ±0.17[†] | 1.46E–05 | 0.439 | –4.8 ±0.10 | 10.45 ±0.02 |
| **SM33** |  | 74.2–75.8 | 92.8 | 1.10E–3 | ‡ | 2.96 ±0.21[†] | ND | ND | ND | >12 |
| **SM34** |  | 56.6–58.9 | 93.5 | 2.20E–3 | ‡ | 2.83 ±0.20[†] | 1.14E–5 | 0.373 | –4.9 ±0.10 | 11.93 ±0.05 |
| **SM35** |  | 151.2–154.2 | 100.0 | 2.20E–2 | 0.88 ±0.02 | 0.87 ±0.06 | ND | ND | ND | 9.87 ±0.01 |
| **SM36** |  | 135.3–136.8 | 90.3 | 4.268E–2 | ‡ | 0.76 ±0.05[†] | 2.91E–6 | 5.07E–2 | –5.54 ±0.11 | 9.80 ±0.06 |
| **SM37** |  | 127.1–127.8 | 93.4 | 1.06E–2 | ‡ | 1.45 ±0.10[†] | 3.41E–6 | 7.13E–2 | –5.47 ±0.11 | 10.33 ±0.02 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SM38** |  | 108.3–108.7 | 100.0 | 4.32E–2 | ‡ | 1.03 ±0.07[†] | 3.66E–06 | –3.00E-3 | –5.4 ±0.10 | 9.44 ±0.02 |
| **SM39** |  | 182.5–184.2 | 98.3 | 1.06E-3 | ‡ | 1.89 ±0.13[†] | ND | ND | ND | 10.22 ±0.15 |
| **SM40** |  | 100.2–101.5 | 100.0 | 8.16E–3 | 1.83 ±0.05 | 1.82 ±0.13 | 4.43E–6 | 0.105 | –5.35 ±0.11 | 9.58 ±0.01 |
| **SM41** |  | 158.0–158.8 | 97.7 | 3.85E–2 | 0.58 ±0.02 | –0.42 ±0.03 | 1.16E–6 | 3.42E–2 | –5.94 ±0.12 | 5.22 ±0.01 |
| **SM42** |  | 164.8–166.0 | 95.5 | 2.17E–3 | 1.76 ±0.03 | 0.99 ±0.07 | 5.79E–6 | –4.81E–2 | –5.24 ±0.10 | 6.62 ±0.02 |
| **SM43** |  | 152.5–152.9 | 97.3 | 2.36E–2 | 0.85 ±0.01 | 0.42 ±0.03 | 2.87E–6 | 0.131 | –5.54 ±0.11 | 5.62 ±0.02 |
| **SM44** |  | 156.0–157.5 | 93.5 | 1.05E–2 | 1.16 ±0.03 | 0.06 ±0.00 | 2.42E–6 | –4.07E–2 | –5.62 ±0.11 | 6.34 ±0.01 |
| **SM45** |  | 163.7–164.5 | 93.3 | 3.62E–4 | 2.55 ±0.04 | 1.06 ±0.07 | 4.09E–6 | 2.76E–4 | –5.39 ±0.11 | 5.93 ±0.05 |
| **SM46** |  | 158.5–159.7 | 93.9 | 2.75E–3 | 1.72 ±0.01 | 0.69 ±0.05 | 3.77E–6 | –4.43E–2 | –5.42 ±0.11 | 6.42 ±0.01 |

[a] Melting point of crystalline material; [b] Test compound (%) remaining after 5 h of incubation at rt in aqueous buffer (pH 7.4) as determined by LC/MS analyses; [c] Intrinsic solubility determined from the general solubility equation (GSE) by using experimentally determined logP and mp values; [d] Log of the partition coefficient between *n*-octanol and water (unless otherwise noted, logP determinations were conducted via potentiometric titrations using a Sirius T3, Pion); [e] Log of the distribution coefficient between *n*-octanol and aqueous buffer at pH 7.4 (unless otherwise noted, $\log D_{7.4}$ determinations were conducted via potentiometric titrations using a Sirius T3, Pion); [f] Calculated values using ChemAxon[37]; [g] Effective permeability (PAMPA assay run by Analiza); [h] Membrane retention; [i] Log of the apparent permeability coefficient ($P_{app}$); [j] p$K_a$ values determined by potentiometric titrations using a Sirius T3, Pion (values in brackets are from [30]); [§] Test compound was an oil; [†] $\log D_{7.4}$ value determined via shake-flask assay (experiment run by Analiza); [‡] logP value is considered equal to the $\log D_{7.4}$ as these compounds exhibit p$K_a$ values >9.4; ND = not determined.