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| Target Name | Histone deacetylase 10 |
| Target TTD ID | TTDR01338 |

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|------------------------|---|
| Target Species | Human |
| Chemical Type | Substituted biaryl hydroxamates |
| Mode of Action | Inhibitor |
| QSAR Model 1 | $pIC_{50}(HDAC10) = -2.029 \times I-NHCOCH_2SH + 1.007 \times I-Thiazole + 7.192$ $R^2=0.92, n=22, RMSE=0.328, p<0.0001$ |
| Molecular Descriptor 1 | <p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>Five QSAR equations were developed from the 23 compounds (biphenyl or phenylthiazoles bearing hydroxamates or mercaptoacetamides) against HDACs 1, 2, 8, 10 and 6 incorporating the binary indicators I-NHCOCH₂SH and I-Thiazole and calculated LogP (ClogP). If the compound is mercaptoacetamide, then I-NHCOCH₂SH = 1.0; otherwise it is 0. If the compound is phenylthiazole, then I-Thiazole = 1.0; otherwise it is 0.</p> |
| Reference | Computational Studies on the Histone Deacetylases and the Design of Selective Histone Deacetylase Inhibitors. <i>Current Topics in Medicinal Chemistry</i> , 2009, 9, 241-256 |

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|----------------|--------------------|
| Target Species | Human |
| Chemical Type | Mercaptoacetamides |
| Mode of Action | Inhibitor |

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|---------------------------------------|---|
| QSAR Model 1 | $pIC_{50}(\text{HDAC10}) = -2.029 \times \text{I-NHCOCH}_2\text{SH} + 1.007 \times \text{I-Thiazole} + 7.192$ $R^2=0.92, n=22, \text{RMSE}=0.328, p<0.0001$ |
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