

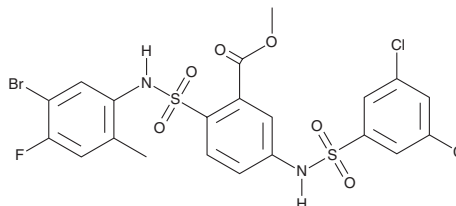
# PRODUCT INFORMATION



## MDL 800

Item No. 35528

**CAS Registry No.:** 2275619-53-7  
**Formal Name:** 2-[[[(5-bromo-4-fluoro-2-methylphenyl)amino)sulfonyl]-5-[[[(3,5-dichlorophenyl)sulfonyl]amino]-benzoic acid, methyl ester  
**MF:** C<sub>21</sub>H<sub>16</sub>BrCl<sub>2</sub>FN<sub>2</sub>O<sub>6</sub>S<sub>2</sub>  
**FW:** 626.3  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

MDL 800 is supplied as a solid. A stock solution may be made by dissolving the MDL 800 in the solvent of choice, which should be purged with an inert gas. MDL 800 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of MDL 800 in these solvents is approximately 1 and 10 mg/ml, respectively.

### Description

MDL 800 is an allosteric activator of sirtuin 6 (SIRT6).<sup>1</sup> It selectively activates SIRT6 deacetylase activity over SIRT1-5 and -7 and histone deacetylase 1 (HDAC1) and HDAC2-11 deacetylase activity in cell-free assays at 100 μM. It induces histone deacetylation (IC<sub>50</sub> = 23.3 μM) in, and reduces proliferation of, BEL-7405 hepatocellular carcinoma (HCC) cells (EC<sub>50</sub> = 90.4 μM). MDL 800 (0.1-5 μM) inhibits TNF-α release induced by oxygen and glucose deprivation (OGD) in primary mouse microglia.<sup>2</sup> *In vivo*, MDL 800 (50, 100, and 150 mg/kg) reduces tumor weight and volume in a BEL-7405 HCC mouse xenograft model.<sup>1</sup>

### References

- Huang, Z., Zhao, J., Deng, W., *et al.* Identification of a cellularly active SIRT6 allosteric activator. *Nat. Chem. Biol.* **14**(12), 1118-1126 (2018).
- He, T., Shang, J., Gao, C., *et al.* A novel SIRT6 activator ameliorates neuroinflammation and ischemic brain injury via EZH2/FOXC1 axis. *Acta Pharm. Sin. B* **11**(3), 708-726 (2021).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/08/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM