

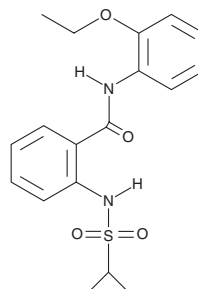
# PRODUCT INFORMATION



## ML-382

Item No. 36668

**CAS Registry No.:** 1646499-97-9  
**Formal Name:** 2-[(cyclopropylsulfonyl)amino]-N-(2-ethoxyphenyl)-benzamide  
**Synonym:** VU0485891  
**MF:** C<sub>18</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub>S  
**FW:** 360.4  
**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

ML-382 is supplied as a solid. A stock solution may be made by dissolving the ML-382 in the solvent of choice, which should be purged with an inert gas. ML-382 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ML-382 in these solvents is approximately 3, 2, and 5 mg/ml, respectively.

### Description

ML-382 is a positive allosteric modulator of MAS-related G protein-coupled receptor family member X1 (MRGPRX1).<sup>1</sup> It potentiates activation of MRGPRX1 induced by the MRGPRX1 agonist BAM 22P (8-22) (Item No. 35263) in HEK293 cells expressing the human receptor (EC<sub>50</sub> = 0.19 μM) but does not potentiate activation of MRGPRX2 induced by the MRGPRX2 agonist proadrenomedullin (PAMP) in HEK293 cells expressing the human receptor at 5 μM. ML-382 is also selective for MRGPRX1 over a panel of 68 G protein-coupled receptors (GPCRs), ion channels, and transporters at 10 μM. It enhances inhibition of high-voltage-activated calcium currents (I<sub>Ca</sub>) induced by BAM 22P (8-22) in dorsal root ganglion neurons isolated from transgenic mice expressing human MRGPRX1 when used at a concentration of 5 μM.<sup>2</sup> Intrathecal administration of ML-382 (5 μl of a 25 μM solution) decreases formalin-induced paw licking and shaking in MRGPRX1 transgenic mice.

### References

1. Wen, W., Wang, Y., Li, Z., *et al.* Discovery and characterization of 2-(cyclopropanesulfonamido)-N-(2-ethoxyphenyl)benzamide, ML382: A potent and selective positive allosteric modulator of MrgX1. *ChemMedChem* **10**(1), 57-61 (2015).
2. Li, Z., Tseng, P.-Y., Tiwari, V., *et al.* Targeting human Mas-related G protein-coupled receptor X1 to inhibit persistent pain. *Proc. Natl. Acad. Sci. USA* **114**(10), E1996-E2005 (2017).

#### 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, 10/31/2024

#### 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