# ML133 Hydrochloride

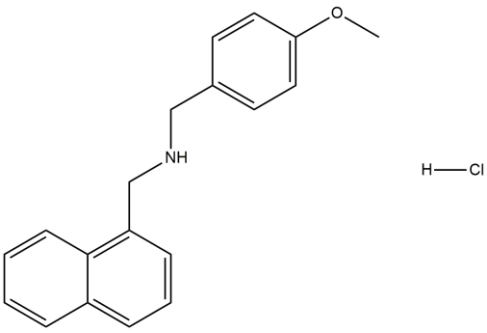
*12/20*

**ALTERNATE NAMES:** 1-(4-methoxyphenyl)-N-(naphthalen-1-ylmethyl)methanamine;hydrochloride; (4-Methoxybenzyl)(1-naphthylmethyl)amine Hydrochloride

**CATALOG #:**

| | |
|---|---|
| B3097-10 | 10 mg |
| B3097-50 | 50 mg |

**STRUCTURE:**




**MOLECULAR FORMULA:** $C_{19}H_{20}ClNO$

**MOLECULAR WEIGHT:** 313.82

**CAS NUMBER:** 1222781-70-5

**APPEARANCE:** Off-white solid

**PURITY:** ≥ 97%

**SOLUBILITY:** ~10 mg/ml in DMSO

**DESCRIPTION:** ML133 is an inward-rectifier potassium channel 2 ($K_{ir}2$) inhibitor. It inhibits $K_{ir}2.1$ with an $IC_{50}$ of 1.8 µM at pH 7.4 and 290 nM at pH 8.5. It is selective for $K_{ir}2$ channels over $K_{ir}1.1$ and $K_{ir}4.1$ channels ($IC_{50}$ values of 300 and 76 µM, respectively). ML133 inhibits the development of dynamic, but not punctate, mechanical allodynia in a mouse model of spared nerve injury.

**STORAGE TEMPERATURE:** -20 ºC. Store in the dark. Product is light sensitive.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**REFERENCES:**

1. Wang, H.-R., Wu, M., Yu, H., et al. Selective inhibition of the Kir2 family of inward rectifier potassium channels by a small molecule probe: The discovery, SAR, and pharmacological characterization of ML133. ACS Chem. Biol. 6(8), 845-856 (2011).
2. Shi, Y., Chen, Y., and Wang, Y. Kir2.1 channel regulation of glycinergic transmission selectively contributes to dynamic mechanical allodynia in a mouse model of spared nerve injury. Neurosci Bull. 35(2), 301-314 (2019).

**RELATED PRODUCTS:**

Astemizole (Cat. No. B3050)
NS-1619 (Cat. No. B1303)
Glibenclamide (Cat. No. 1878)
ML-365 (Cat. No. B2076)
Lamotrigine (Cat. No. B1234)

**DISCLAIMER:** ***FOR RESEARCH USE ONLY! Not to be used on humans.***