

ML133 HCl, Kir2 potassium channel blocker

Catalog	Unit
TBI5098-5MG	5 mg
TBI5098-25MG	25 mg

Product Details

Formal Name: N-[(4-Methoxyphenyl)methyl]-1-naphthalenemethanamine, hydrochloride

Molecular Formula: C₁₉H₁₉NO • HCl

Formula Weight: 313.8

CAS Number: 1222781-70-5

Purity: >98%

Formulation: Powder

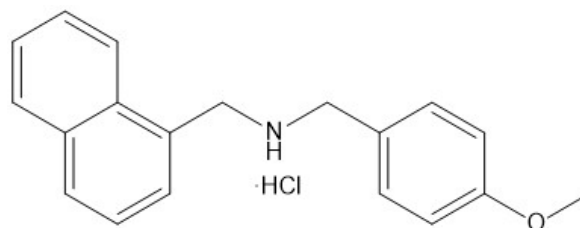
Solubility: Soluble in DMSO (32 mg/ml); or Water (10 mg/ml with warming)

Storage: -20°C

Stability: ≥ 2 years.

Applications

Kir2 potassium channel blocker



Functions

A potent and selective blocker of the inwardly rectifying Kir2 potassium channel, IC₅₀s = 1.8, 2.8, 2.9, and 4.0 μM for Kir2.1, Kir2.6, Kir2.2, and Kir2.3, respectively. Intrathecal injection of ML133 attenuated the proliferation of microglia and neuropathic pain behaviors after nerve injury. ML133 inhibits microglial priming pointing to Kir2.1 channels as a new therapeutic target for neuronal damage. Moreover, treatment with ML133 one hour post-injury was sufficient to improve neuronal survival in a traumatic brain injury human organoid model.

Application Procedures

First dissolved in DMSO (32 mg/ml) or Water (10 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or water may be stored at -20°C for up to 3 months.

For research use only.