

ML277, Potent Kv7.1 activator

Catalog	Unit
TBI4074-5MG	5 mg
TBI4074-25MG	25 mg

Product Details

Formal Name: (2R)-N-[4-(4-Methoxyphenyl)-2-thiazolyl]-1-[(4-methylphenyl)(sulfonyl)-2-piperidinecarboxamide

Alternate Names: (R)-N-(4-(4-Methoxyphenyl)thiazol-2-yl)-1-tosylpiperidine-2-carboxamide

Molecular Formula: C₂₃H₂₅N₃O₄S₂

Formula Weight: 471.6

CAS Number: 1401242-74-7

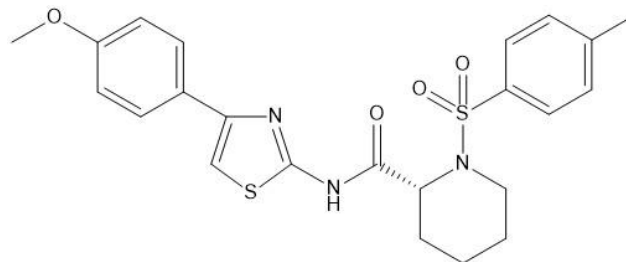
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (up to 20 mg/ml)

Storage: -20°C

Stability: ≥ 1 year.



Applications

Potent Kv7.1 activator

Functions

ML277 is a potent (EC₅₀ = 260 nM) activator of Kv7.1 with selectivity against Kv7.2, Kv7.4, and Kv11.1 (hERG). ML277 enhances cardiac delayed rectifier K⁺ currents (IKs) in human iPSC-derived cardiomyocytes from normal and long QT-interval syndrome afflicted patients suggesting potential therapeutic use in long QT-interval syndrome. It displayed cardioprotective effects against ischemia in cellular and whole-heart models.

Application Procedures

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

For research use only.