ML-277
Item No. 15193

CAS Registry No.: 140124-74-7
Formal Name: (2R)-N-[4-(4-methoxyphenyl)-2-thiazolyl]-1-[(4-methylphenyl)sulfonyl]-2-piperidinecarboxamide
Synonym: CID-53347902
MF: C23H25N3O4S2
FW: 471.6
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λmax: 242, 270 nm

Laboratory Procedures
For long term storage, we suggest that ML-277 be stored as supplied at -20°C. It should be stable for at least two years. ML-277 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-277 in the solvent of choice. ML-277 is soluble in DMSO at a concentration of approximately 5 mg/ml.

Potassium (K+), channels are categorized by their mode of activation and the number of transmembrane segments. The voltage-gated six-transmembrane K+ channels include KCNQ1, first recognized for its role in cardiac function and subsequently in hearing, gastrointestinal chloride secretion, and other processes. ML-277 is a potent activator of KCNQ1 channels (EC50 = 260 nM). The EC50 value of this compound at the related channels KCNQ2, KCNQ4, and hERG exceeds 30 µM. ML-277 potentiates both homomultimeric KCNQ1 channels and unsaturated heteromultimeric (KCNQ1/KCNE1) channels in model cardiomyocytes and augments delayed rectifier K+ current in cultured human cardiomyocytes.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/15193

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.