PRODUCT INFORMATION



ML-335

Item No. 27635

CAS Registry No.: 825658-06-8

Formal Name: N-[(2,4-dichlorophenyl)methyl]-4-

[(methylsulfonyl)amino]-benzamide

MF: C₁₅H₁₄Cl₂N₂O₃S

FW: 373.3 **Purity:** ≥98% λ_{max} : 258 nm A solid UV/Vis.: Supplied as: 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-335 is supplied as a solid. A stock solution may be made by dissolving the ML-335 in the solvent of choice, which should be purged with an inert gas. ML-335 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-335 in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

ML-335 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-335 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-335 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ML-335 is an activator of the two-pore domain potassium channels $K_{2p}2.1/TREK1$ and $K_{2p}10.1/TREK2$ (EC $_{50}$ s = 14.3 and 5.2 μ M, respectively, in *Xenopus* oocytes). It is selective for $K_{2p}2.1/TREK1$ and $K_{2p}10.1/TREK2$ channels over $K_{2p}4.1/TRAAK$ channels. ML-335 activates K_{2p} 2.1/TREK1 by binding to the C-type gate, which is the active site of TREK channels.

Reference

1. Lolicato, M., Arrigoni, C., Mori, T., et al. K_{2P}2.1(TREK-1): Activator complexes reveal a cryptic selectivity filter binding site. Nature 547(7663), 364-368 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

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