

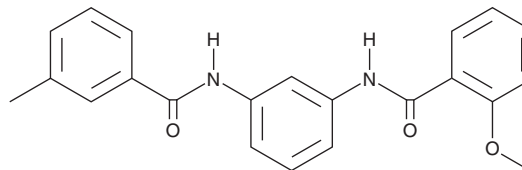
PRODUCT INFORMATION



ML-365

Item No. 24666

CAS Registry No.: 947914-18-3
Formal Name: 2-methoxy-N-[3-[(3-methylbenzoyl)amino]phenyl]-benzamide
MF: C₂₂H₂₀N₂O₃
FW: 360.4
Purity: ≥98%
UV/Vis.: λ_{max}: 206, 268 nm
Supplied as: A crystalline solid
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-365 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-365 in the solvent of choice. ML-365 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of ML-365 in these solvents is approximately 1, 50, and 20 mg/ml, respectively.

ML-365 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-365 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ML-365 has a solubility of approximately 0.16 mg/ml in a 1:5 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-365 is a *bis*-amide TASK-1 potassium channel blocker (IC₅₀ = 16 nM).¹ It is selective for TASK-1 over TASK-3 channels in a QPatch assay (IC₅₀ = 990 nM). It also acts as an antagonist of the metabotropic glutamate receptor mGluR5 (IC₅₀ = 1.35 μM).²

References

1. Flaherty, D.P., Simpson, D.S., Miller, M., *et al.* Potent and selective inhibitors of the TASK-1 potassium channel through chemical optimization of a *bis*-amide scaffold. *Bioorg. Med. Chem. Lett.* **24(16)**, 3968-3973 (2014).
2. Zhou, Y., Rodriguez, A.L., Williams, R., *et al.* Synthesis and SAR of novel, non-MPEP chemotype mGluR5 NAMs identified by functional HTS. *Bioorg. Med. Chem. Lett.* **19(23)**, 6502-6506 (2009).

WARNING

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

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