

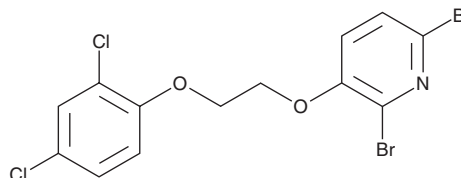
PRODUCT INFORMATION



ML-178

Item No. 18527

CAS Registry No.: 1355026-47-9
Formal Name: 2,6-dibromo-3-[2-(2,4-dichlorophenoxy)ethoxy]-pyridine
Synonyms: CID-44620892, CYM 50179, SID 87544119
MF: C₁₃H₉Br₂Cl₂NO₂
FW: 441.9
Purity: ≥95%
UV/Vis.: λ_{max}: 231, 291 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-178 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-178 in the solvent of choice, which should be purged with an inert gas. ML-178 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of ML-178 in these solvents is approximately 15 and 30 mg/ml, respectively.

ML-178 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-178 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ML-178 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Sphingosine-1-phosphate (S1P) is an extracellular lipid mediator whose major effects are mediated through four of the S1P receptors (S1P₁/EDG-1, S1P₂/EDG-5, S1P₃/EDG-3, S1P₄/EDG-6, and S1P₅/EDG-8). Binding of S1P to S1P₄ activates ERK, MAPK, and PLC downstream signal transduction pathways. ML-178 activates S1P₄ with an EC₅₀ value of 46.3 nM and is inactive against S1P₁, S1P₂, S1P₃, and S1P₅ (EC₅₀s = >50 μM) and has no effect against a panel of additional receptors, transporters, and ion channels.¹

Reference

- Guerrero, M., Urbano, M., Velaparthi, S., *et al.* Probe development efforts to identify novel agonists of the sphingosine 1-phosphate receptor 4 (S1P₄). Bethesda, MD, National Center for Biotechnology Information, in Probe Reports for the NIH Molecular Libraries Program, (2010).

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.

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