

PRODUCT INFORMATION



ML-299

Item No. 17632

CAS Registry No.: 1426916-00-8

Formal Name: 4-bromo-N-[(1S)-2-[1-(3-fluorophenyl)-4-oxo-1,3,8-triazaspiro[4.5]dec-8-yl]-1-methylethyl]-benzamide

Synonym: CID 56593087

MF: C₂₃H₂₆BrFN₄O₂

FW: 489.4

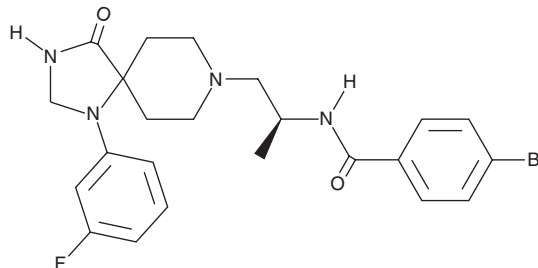
Purity: ≥95%

UV/Vis.: λ_{max}: 247 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ML-299 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-299 in the solvent of choice, which should be purged with an inert gas. ML-299 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-299 in these solvents is approximately 1, 25, and 30 mg/ml, respectively.

ML-299 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-299 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ML-299 has a solubility of approximately 0.5 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ML-299 is a dual inhibitor of phospholipase D₁ (PLD₁) and PLD₂ (IC₅₀s = 6 and 20 nM, respectively).¹ It is selective for PLD₁ and PLD₂ over a panel of 65 receptors but also inhibits human-ether-a-go-go (hERG), also known as K_v11.1, as well as κ- and μ-opioid receptors at 10 μM. ML-299 (1 and 10 μM) decreases invasive migration of U87MG glioblastoma cells.¹

References

1. O'Reilly, M.C., Scott, S.A., Brown, K.A., *et al.* Development of dual PLD1/2 and PLD2 selective inhibitors from a common 1,3,8-triazaspiro[4.5]decane core: Discovery of ML298 and ML299 that decrease invasive migration in U87-MG glioblastoma cells. *J. Med. Chem.* **56**(6), 2695-2699 (2013).
2. Scott, S.A., O'Reilly, M.C., Daniels, J.S., *et al.* Development of a selective, allosteric PLD1/2 inhibitor in a novel scaffold. In: Probe reports from the NIH Molecular Libraries Program [Internet]. Bethesda (MD): National Center for Biotechnology Information(2013). Available from: <http://www.ncbi.nlm.nih.gov/books/NBK143555/>

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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