

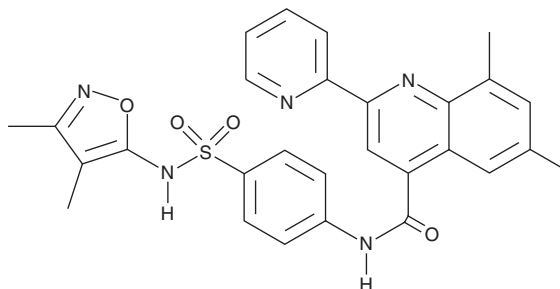
PRODUCT INFORMATION



ML-193

Item No. 15184

CAS Registry No.: 713121-80-3
Formal Name: N-[4-[[[3,4-dimethyl-5-isoxazolyl)amino]sulfonyl]phenyl]-6,8-dimethyl-2-(2-pyridinyl)-4-quinolinecarboxamide
Synonym: CID-1261822
MF: C₂₈H₂₅N₅O₄S
FW: 527.6
Purity: ≥95%
UV/Vis.: λ_{max}: 261, 279 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-193 is supplied as a crystalline solid. A stock solution may be made by dissolving the ML-193 in the solvent of choice, which should be purged with an inert gas. ML-193 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ML-193 in these solvents is approximately 0.1, 2, and 3 mg/ml, respectively.

ML-193 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ML-193 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ML-193 has a solubility of approximately 0.2 mg/ml in a 1:4 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-193 is a potent antagonist of GPR55 (IC₅₀ = 221 nM).^{1,2} It displays selectivity for GPR55 over CB₁, CB₂, and GPR35. ML-193 inhibits GPR55-dependent ERK phosphorylation (IC₅₀ = 65 nM) and blocks translocation of PKCβII.¹ ML-193 blocks increases in intracellular calcium levels induced by lysophosphatidylinositol (LPI) in dissociated rat periaqueductal gray neurons and modulates pain perception in LPI-treated rats.³

References

1. Heynen-Genel, S., Dahl, R., Shi, S., *et al.* Screening for selective ligands for GPR55. *Probe Reports from the NIH Molecular Libraries Program* (2010).
2. Kotsikorou, E., Sharir, H., Shore, D. M. *et al.* Identification of the GPR55 antagonist binding site using a novel set of high-potency GPR55 selective ligands. *Biochemistry* **52**(52), 9456-9469 (2013).
3. Deliu, E., Sperow, M., Console-Bram, L., *et al.* The lysophosphatidylinositol receptor GPR55 modulates pain perception in the periaqueductal gray. *Mol. Pharmacol.* **88**(2), 265-272 (2015).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM