

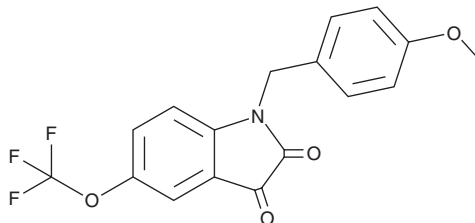
PRODUCT INFORMATION



VU0238429

Item No. 34411

CAS Registry No.: 1160247-92-6
Formal Name: 1-[(4-methoxyphenyl)methyl]-5-(trifluoromethoxy)-1H-indole-2,3-dione
Synonyms: HY-12157, ML129
MF: C₁₇H₁₂F₃NO₄
FW: 351.3
Purity: ≥98%
UV/Vis.: λ_{max}: 228, 245 nm
Supplied as: A 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

VU0238429 is supplied as a solid. A stock solution may be made by dissolving the VU0238429 in the solvent of choice, which should be purged with an inert gas. VU0238429 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of VU0238429 in these solvents is approximately 15, 25, and 20 mg/ml, respectively.

Description

VU0238429 is a positive allosteric modulator of M₅ muscarinic acetylcholine receptors (mAChRs; EC₅₀ = 1.16 μM in a calcium mobilization assay).¹ It is selective for M₅ mAChRs over M₁, M₂, M₃, and M₄ mAChRs in CHO cells expressing the human receptors (EC₅₀s = >30 μM for all in calcium mobilization assays). VU0238429 (10 mg/kg) reduces head-twitch behavior induced by the serotonin (5-HT) receptor subtype 5-HT_{2A} agonist DOI in mice.² It reverses MK-801-induced memory deficits in the novel object recognition test in mice when administered alone or in combination with the GABA_B receptor positive allosteric modulator GS-39783 (Item No. 29482).

References

1. Bridges, T.M., Marlo, J.E., Niswender, C.M., *et al.* Discovery of the first highly M5-preferring muscarinic acetylcholine receptor ligand, an M5 positive allosteric modulator derived from a series of 5-trifluoromethoxy N-benzyl isatins. *J. Med. Chem.* **52**(11), 3445-3448 (2009).
2. Cieřlik, P., Woźniak, M., Tokarski, K., *et al.* Simultaneous activation of muscarinic and GABA_B receptors as a bidirectional target for novel antipsychotics. *Behav. Brain Res.* **359**, 671-685 (2019).

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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