PRODUCT INFORMATION



VU0119498

Item No. 36132

CAS Registry No.:	79183-37-2	/ Br
Formal Name:	1-[(4-bromophenyl)methyl]-1H-indole-2,3-dione	
MF:	C ₁₅ H ₁₀ BrNO ₂	
FW:	316.2	N.
Purity:	≥98%	
Supplied as:	A solid	
Storage:	-20°C	- I
Stability:	≥4 years	0
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

VU0119498 is supplied as a solid. A stock solution may be made by dissolving the VU0119498 in the solvent of choice, which should be purged with an inert gas. VU0119498 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of VU0119498 in these solvents is approximately 2 and 5 mg/ml, respectively.

Description

VU0119498 is a positive allosteric modulator (PAM) of M_1 , M_3 , and M_5 muscarinic acetylcholine receptors (mAChRs; $EC_{50}s = 6.04$, 6.38, and 4.08 μ M, respectively, in calcium mobilization assays).¹ It is selective for M₁, M₃, and M₅ mAChRs over M₂ and M₄ mAChRs in CHO cells expressing the human receptors. VU0119498 (20 μ M) enhances ACh-induced insulin secretion in MIN6-K8 pancreatic β -cells.² It decreases glucose tolerance and increases insulin secretion in mice fed normal chow, as well as in a mouse model of high-fat diet-induced obesity, when administered at a dose of 0.5 mg/kg.

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. Zhu, L., Rossi, M., Cohen, A., et al. Allosteric modulation of β-cell M₂ muscarinic acetylcholine receptors greatly improves glucose homeostasis in lean and obese mice. Proc. Natl. Acad. Sci. U.S.A. 116(37), 18684-18690 (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.

WARRANTY AND LIMITATION OF REMEDY

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