

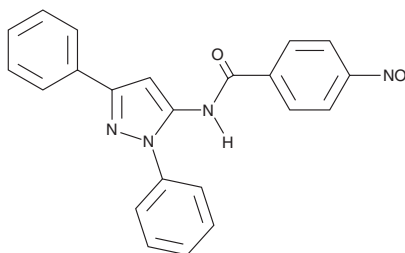
PRODUCT INFORMATION



VU29

Item No. 43928

CAS Registry No.: 890764-36-0
Formal Name: N-(1,3-diphenyl-1H-pyrazol-5-yl)-4-nitro-benzamide
MF: C₂₂H₁₆N₄O₃
FW: 384.4
Purity: ≥98%
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

VU29 is supplied as a solid. A stock solution may be made by dissolving the VU29 in the solvent of choice, which should be purged with an inert gas. VU29 is soluble (≥10 mg/ml) in DMSO.

Description

VU29 is a positive allosteric modulator (PAM) of metabotropic glutamate receptor 5 (mGluR5; K_i = 250 nM).¹ It potentiates glutamate-induced calcium flux in primary rat cortical astrocytes (EC₅₀ = 10.7 nM). VU29 (30 mg/kg) prevents ethanol-induced memory impairments in the novel object recognition test in rats.² It also reverses ethanol-induced conditioned place preference in rats when administered at a dose of 10 mg/kg for ten days, an effect that can be reversed by MTEP (Item No. 14961) or MK-801.³

References

1. de Paulis, T., Hemstapat, K., Chen, Y., *et al.* Substituent effects of N-(1,3-diphenyl-1H-pyrazol-5-yl) benzamides on positive allosteric modulation of the metabotropic glutamate-5 receptor in rat cortical astrocytes. *J. Med. Chem.* **49(11)**, 3332-3344 (2006).
2. Marszalek-Grabska, M., Gibula-Bruzda, E., Bodzon-Kulakowska, A., *et al.* Effects of the positive allosteric modulator of metabotropic glutamate receptor 5, VU-29, on impairment of novel object recognition induced by acute ethanol and ethanol withdrawal in rats. *Neurotox. Res.* **33(3)**, 607-620 (2018).
3. Marszalek-Grabska, M., Gawel, K., Matosiuk, D., *et al.* Effects of the positive allosteric modulator of metabotropic glutamate receptor 5, VU-29, on maintenance association between environmental cues and rewarding properties of ethanol in rats. *Biomolecules* **10(5)**, 793 (2020).

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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