

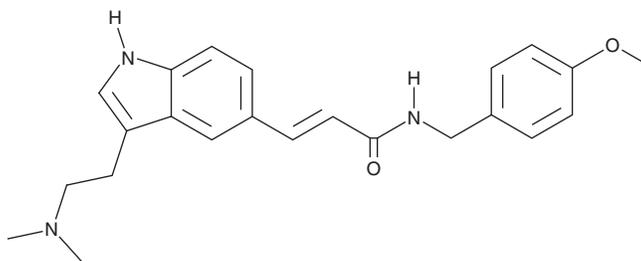
PRODUCT INFORMATION



GR46611

Item No. 42235

CAS Registry No.: 185259-85-2
Formal Name: 3-[3-[2-(dimethylamino)ethyl]-1H-indol-5-yl]-N-[(4-methoxyphenyl)methyl]-2-propenamide
MF: C₂₃H₂₇N₃O₂
FW: 377.5
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

GR46611 is supplied as a solid. A stock solution may be made by dissolving the GR46611 in the solvent of choice, which should be purged with an inert gas. GR46611 is soluble (≥10 mg/ml) in DMSO and slightly sparingly soluble (1-10 mg/ml) in ethanol.

Description

GR46611 is an agonist of the serotonin (5-HT) receptor subtype 5-HT_{1D}.¹ It induces cAMP accumulation in CHO cells expressing the human receptor when used at a concentration of 10 μM. It also binds to 5-HT_{1A} and 5-HT_{1B} receptors (K_is = 1.3 and 0.2 nM, respectively). GR46611 (50 μmol/kg) induces hypothermia and decreases hypothalamus and prefrontal cortex levels of 5-hydroxyindoleacetic acid (5-HIAA) in guinea pigs. It potentiates increases in locomotor activity induced by buspirone or 8-hydroxy DPAT (Item No. 22608) in guinea pigs when administered at a dose of 2.5 mg/kg.² GR46611 decreases the number of conditioned responses in an autoshaping learning task in mice when administered after training at a dose of 10 mg/kg, indicating impaired memory consolidation.³

References

1. Barf, T.A., de Boer, P., Wikström, H., et al. 5-HT_{1D} receptor agonist properties of novel 2-[5-[[[(trifluoromethyl)sulfonyl]oxy]indolyl]ethylamines and their use as synthetic intermediates. *J. Med. Chem.* **39(24)**, 4717-4726 (1996).
2. O'Neill, M.F. and Sanger, G.J. GR46611 potentiates 5-HT_{1A} receptor-mediated locomotor activity in the guinea pig. *Eur. J. Pharmacol.* **370(2)**, 85-92 (1999).
3. Meneses, A., Terrón, J.A., and Hong, E. Effects of the 5-HT receptor antagonists GR127935 (5-HT_{1B/1D}) and MDL100907 (5-HT_{2A}) in the consolidation of learning. *Behav. Brain Res.* **89(1-2)**, 217-223 (1997).

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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