

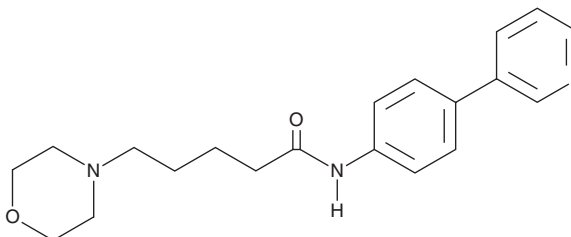
PRODUCT INFORMATION



SEN-12333

Item No. 36123

CAS Registry No.: 874450-44-9
Formal Name: N-[4-(3-pyridinyl)phenyl]-4-morpholinopentanamide
Synonym: WAY-317538
MF: C₂₀H₂₅N₃O₂
FW: 339.4
Purity: ≥98%
UV/Vis.: λ_{max}: 282 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

SEN-12333 is supplied as a solid. A stock solution may be made by dissolving the SEN-12333 in the solvent of choice, which should be purged with an inert gas. SEN-12333 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SEN-12333 in ethanol is approximately 3 mg/ml and approximately 5 mg/ml in DMSO and DMF.

Description

SEN-12333 is an agonist of α7 nicotinic acetylcholine receptors (nAChRs; K_i = 0.26 μM).¹ It is selective for α7 nAChRs over α1-, α3-, and α4β2 subunit-containing nAChRs and the serotonin (5-HT) receptor subtype 5-HT₃, as well as a panel of 70 additional neurotransmitter, growth factor, and peptide receptors at 10 μM. SEN-12333 activates the α7 nAChR in GH4C1 cells expressing the rat receptor (EC₅₀ = 1.6 μM). Topical application of SEN-12333 prevents decreases in the number of retinal ganglion cells in a rat model of glaucoma in a concentration-dependent manner.² SEN-12333 (3 mg/kg) reverses scopolamine- or MK-801-induced memory deficits in the novel object recognition test in rats.¹

References

1. Haydar, S.N., Ghiron, C., Bettinetti, L., *et al.* SAR and biological evaluation of SEN12333/WAY-317538: Novel alpha 7 nicotinic acetylcholine receptor agonist. *Bioorg. Med. Chem.* **17(14)**, 5247-5258 (2009).
2. Birkholz, P.J., Gossman, C.A., Webster, M.K., *et al.* Prevention of glaucoma-induced retinal ganglion cell loss using alpha7 nAChR agonists. *J. Ophthalmol. Vis. Sci.* **1(1)**, 1003 (2016).

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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