

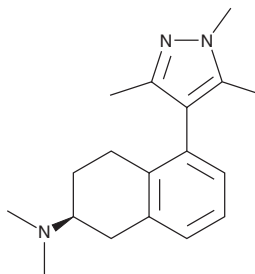
PRODUCT INFORMATION



AS-19

Item No. 20642

CAS Registry No.: 1000578-26-6
Formal Name: 1,2S,3,4-tetrahydro-N,N-dimethyl-5-(1,3,5-trimethyl-1H-pyrazol-4-yl)-2-naphthalenamine
MF: C₁₈H₂₅N₃
FW: 283.4
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

AS-19 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. AS-19 is miscible in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas.

Description

AS-19 is an agonist of the serotonin (5-HT) receptor subtype 5-HT₇ (K_i = 0.6 nM).¹ It is selective for 5-HT₇ over 5-HT_{1A}, 5-HT_{1B}, 5-HT_{1D}, and 5-HT_{5A} receptors (K_is = 89.7, 490, 6.6 and 98.5 nM, respectively), as well as sigma-1 and imidazoline I₂ receptors (K_is = 657 and 282 nM, respectively). AS-19 increases conditioned responses and reverses amnesia induced by the muscarinic acetylcholine receptor antagonist scopolamine in rats in an autoshaping learning task when administered post-training at a dose of 5 mg/kg.² It increases the paw withdrawal threshold in a mechanical pressure test in rats with chronic constriction injury when 0.3 μl of a 1.5 nM solution is injected into the ventrolateral periaqueductal gray area (vIPAG), an effect that can be blocked by the 5-HT₇ receptor antagonist SB-269970 (Item No. 17081).³

References

1. Brenchat, A., Romero, L., García, M., et al. 5-HT₇ receptor activation inhibits mechanical hypersensitivity secondary to capsaicin sensitization in mice. *Pain* **141**(3), 239-247 (2009).
2. Perez-García, G.S. and Meneses, A. Effects of the potential 5-HT₇ receptor agonist AS 19 in an autoshaping learning task. *Behav. Brain Res.* **163**(1), 136-140 (2005).
3. Li, S.-F., Zhang, Y.-Y., Li, Y.-Y., et al. Antihyperalgesic effect of 5-HT₇ receptor activation on the midbrain periaqueductal gray in a rat model of neuropathic pain. *Pharmacol. Biochem. Behav.* **127**, 49-55 (2014).

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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