

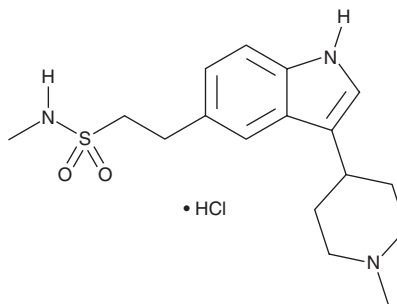
PRODUCT INFORMATION



Naratriptan (hydrochloride)

Item No. 23754

CAS Registry No.: 143388-64-1
Formal Name: N-methyl-3-(1-methyl-4-piperidinyl)-1H-indole-5-ethanesulfonamide, monohydrochloride
MF: C₁₇H₂₅N₃O₂S • HCl
FW: 371.9
Purity: ≥95%
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

Naratriptan (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the naratriptan (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Naratriptan (hydrochloride) is slightly soluble in methanol and DMSO.

Naratriptan (hydrochloride) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Naratriptan is a potent agonist of the serotonin (5-HT) receptor subtypes 5-HT_{1B} and 5-HT_{1D} (IC₅₀s = 9.4 and 1.5 nM, respectively, in a radioligand binding assay using human recombinant receptors).¹ It is selective for 5-HT_{1B} and 5-HT_{1D}, lacking activity in rat aorta, guinea pig colon, and pig vena cava, that highly express 5-HT_{2A}, 5-HT₄, and 5-HT₇ receptors, respectively, at concentrations up to 10 μM.² Naratriptan induces contraction of isolated human coronary arteries (EC₅₀ = 170 nM). *In vivo*, naratriptan (1-300 μg/kg) induces dose-dependent vasoconstriction of the carotid vascular bed in dogs. It also inhibits plasma protein extravasation induced by electrical stimulation of the trigeminal ganglion in the dura of anesthetized rats. Formulations containing naratriptan have been used in the treatment of migraine headaches.

References

1. Doménech, T., Beleta, J., and Palacios, J.M. Characterization of human serotonin 1D and 1B receptors using [³H]-GR-125743, a novel radiolabelled serotonin 5HT1D/1B receptor antagonist. *Naunyn Schmiedebergs Arch. Pharmacol.* **356(3)**, 328-334 (1997).
2. Connor, H.E., Feniuk, W., Beattie, D.T., et al. Naratriptan: Biological profile in animal models relevant to migraine. *Cephalalgia* **17(3)**, 145-152 (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.

WARRANTY AND LIMITATION OF REMEDY

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