

PRODUCT INFORMATION



3,4-dihydro Naratriptan

Item No. 17890

CAS Registry No.: 121679-20-7

Formal Name: N-methyl-3-(1,2,3,6-tetrahydro-1-methyl-4-pyridinyl)-1H-indole-5-ethanesulfonamide

Synonym: Naratriptan Impurity B

MF: $C_{17}H_{23}N_3O_2S$

FW: 333.4

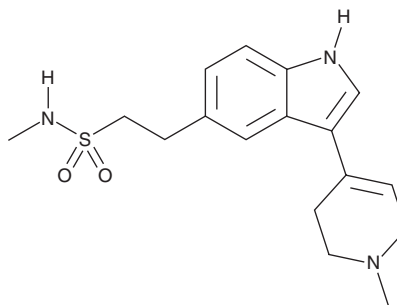
Purity: $\geq 95\%$

UV/Vis.: λ_{max} : 228, 260, 285 nm

Supplied as: A crystalline solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

3,4-dihydro Naratriptan is supplied as a crystalline solid. A stock solution may be made by dissolving the 3,4-dihydro naratriptan in the solvent of choice, which should be purged with an inert gas. 3,4-dihydro Naratriptan is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 3,4-dihydro naratriptan in ethanol is approximately 0.1 mg/ml and approximately 10 mg/ml in DMSO and DMF.

3,4-dihydro Naratriptan is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 3,4-dihydro naratriptan should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 3,4-dihydro Naratriptan has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Naratriptan is a selective serotonin 5-HT_{1B} agonist ($pK_i = 8.9$ for human 5-HT_{1B}) used in the treatment of severe cephalic pain, including migraine headaches.¹⁻³ 3,4-dihydro Naratriptan is an impurity formed during the preparation of naratriptan.⁴

References

1. Gilmore, B. and Michael, M. Treatment of acute migraine headache. *Am. Fam. Physician* **83**(3), 271-280 (2011).
2. Wurch, T., Palmier, C., Colpaert, F.C., *et al.* Recombinant saphenous vein 5-HT_{1B} receptors of the rabbit: Comparative pharmacology with human 5-HT_{1B} receptors. *Br. J. Pharmacol.* **120**(1), 153-159 (1997).
3. Ferrari, M.D., Goadsby, P.J., Roon, K.I., *et al.* Triptans (serotonin, 5-HT_{1B/1D} agonists) in migraine: Detailed results and methods of meta-analysis of 53 trials. *Cephalalgia* **22**, 633-658 (2002).
4. Kumar, U.S., Sankar, V.R., Kumar, S.B., *et al.* An investigation into formation of impurity B during the optimization of naratriptan hydrochloride. *Org. Process Res. Dev.* **13**, 468-470 (2009).

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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