

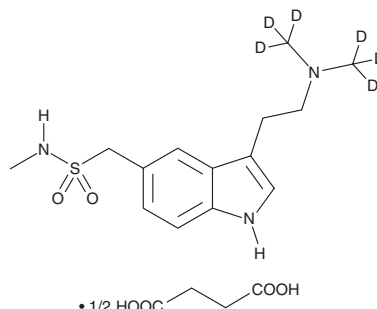
PRODUCT INFORMATION



Sumatriptan-d₆ (succinate)

Item No. 28202

CAS Registry No.: 1397195-80-0
Formal Name: 3-[2-[di(methyl-d₃)amino]ethyl]-N-methyl-1H-indole-5-methanesulfonamide, butanedioic acid (2:1)
MF: C₁₄H₁₅D₆N₃O₂S • 1/2C₄H₆O₄
FW: 360.4
Chemical Purity: ≥98% (Sumatriptan)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
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

Sumatriptan-d₆ (succinate) is intended for use as an internal standard for the quantification of sumatriptan (Item No. 14600) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Sumatriptan-d₆ (succinate) is supplied as a solid. A stock solution may be made by dissolving the sumatriptan-d₆ (succinate) in the solvent of choice, which should be purged with an inert gas. Sumatriptan-d₆ (succinate) is soluble in the organic solvent DMSO.

Description

Sumatriptan is an agonist of the serotonin (5-HT) receptor subtypes 5-HT_{1B} and 5-HT_{1D} (IC₅₀s = 9.3 and 7.3 nM, respectively).¹ It also binds to the 5-HT_{1F} receptor (IC₅₀ = 17.8 nM). It induces vasoconstriction in isolated human middle meningeal arteries (EC₅₀ = 89.9 nM), an effect that can be reduced by the 5-HT_{1B/1D} receptor antagonists GR125743 and GR127935 (Item No. 29651). Sumatriptan reduces acute, but not chronic, mechanical hyperalgesia in a mouse model of pain induced by nitroglycerin, which is a known migraine trigger in humans.² Formulations containing sumatriptan have been used in the treatment of migraine headache.

References

1. Razzaque, Z., Heald, M.A., Pickard, J.D., *et al.* Vasoconstriction in human isolated middle meningeal arteries: Determining the contribution of 5-HT_{1B}- and 5-HT_{1F}-receptor activation. *Br. J. Pharmacol.* **47**(1), 75-82 (1999).
2. Pradhan, A., Smith, M.L., McGuire, B., *et al.* Characterization of a novel model of chronic migraine. *Pain* **155**(2), 269-274 (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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