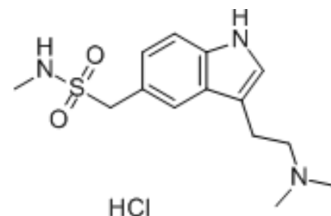


Sumatriptan hydrochloride

Cat. No.:	HY-B0121A
CAS No.:	103628-62-2
Molecular Formula:	C ₁₄ H ₂₂ ClN ₃ O ₂ S
Molecular Weight:	331.86
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sumatriptan hydrochloride (GR 43175) is an orally active 5-HT ₁ receptor agonist with IC ₅₀ s of 7.3 nM, 9.3nM and 17.8 nM for 5-HT _{1D} , 5-HT _{1B} and 5-HT _{1F} receptors, respectively. Sumatriptan hydrochloride can be used for migraine headache research [1][2][3][4].			
IC₅₀ & Target	5-HT _{1D} Receptor 17 nM (Ki)	5-HT _{1B} Receptor 27 nM (Ki)	5-HT _{1A} Receptor 100 nM (Ki)	5-HT _{1D} Receptor 7.3 nM (IC ₅₀)
	5-HT _{1B} Receptor 9.3 nM (IC ₅₀)	5-HT _{1F} Receptor 17.8 nM (IC ₅₀)		
In Vivo	Sumatriptan (600 µg/kg, i.p. or 0.06 µg in 5 µL, i.t.) reverses nitroglycerin-induced thermal hypersensitivity in mice ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

CUSTOMER VALIDATION

- Personalized Medicine Universe. 2019 May.

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REFERENCES

- [1]. Razzaque Z, et al. Vasoconstriction in human isolated middle meningeal arteries: determining the contribution of 5-HT_{1B}- and 5-HT_{1F}-receptor activation. Br J Clin Pharmacol. 1999 Jan;47(1):75-82.
- [2]. Bates EA, et al. Sumatriptan alleviates nitroglycerin-induced mechanical and thermal allodynia in mice. Cephalalgia. 2010 Feb;30(2):170-8.
- [3]. K L Dechant, et al. Sumatriptan. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in the acute treatment of migraine and cluster headache. Drugs. 1992 May;43(5):776-98.
- [4]. S J Peroutka, et al. Sumatriptan (GR 43175) interacts selectively with 5-HT_{1B} and 5-HT_{1D} binding sites. Eur J Pharmacol. 1989 Apr 12;163(1):133-6.

Caution: Product has not been fully validated for medical applications. For research use only.

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