PRODUCT INFORMATION



Zolmitriptan

Item No. 15871

CAS Registry No.: 139264-17-8

4S-[[3-[2-(dimethylamino)ethyl]-1H-Formal Name:

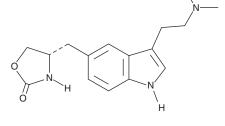
indol-5-yl]methyl]-2-oxazolidinone

Synonym: BW 311C90 MF: $C_{16}H_{21}N_3O_2$ FW: 287.4 **Purity:** ≥98%

UV/Vis.: λ_{max} : 227, 286 nm Supplied as: A crystalline 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

Zolmitriptan is supplied as a crystalline solid. A stock solution may be made by dissolving the zolmitriptan in the solvent of choice, which should be purged with an inert gas. Zolmitriptan is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of zolmitriptan in these solvents is approximately 10, 25, and 30 mg/ml, respectively.

Zolmitriptan is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, zolmitriptan should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Zolmitriptan 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

Zolmitriptan is a triptan that acts as an agonist of the serotonin (5-HT; Item No. 14332) receptors $5-HT_{1B}$ and $5-HT_{1D}$ (K_is = 2.2 and 0.92 nM, respectively). Through this action, zolmitriptan inhibits cAMP formation in blood vessels, resulting in vessel constriction. ^{1,2} Triptans, including zolmitriptan, are considered first-line therapy for moderate to severe migraine.³

References

- 1. Perez, M., Fourrier, C., Sigogneau, I., et al. Synthesis and serotonergic activity of arylpiperazide derivatives of serotonin: Potent agonists for 5-HT_{1D} receptors. J. Med. Chem. 38(18), 3602-3607 (1995).
- 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. Gilmore, B. and Michael, M. Treatment of acute migraine headache. Am. Fam. Physician 83(3), 271-280 (2011).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM