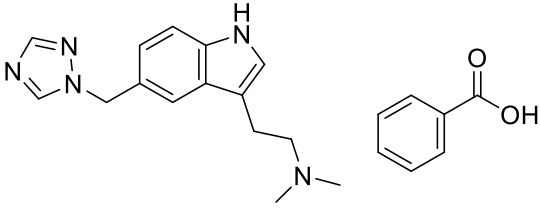


Product data sheet



MedKoo Cat#: 318673 Name: Rizatriptan Benzoate CAS#: 145202-66-0 Chemical Formula: C ₂₂ H ₂₅ N ₅ O ₂ Molecular Weight: 391.47	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

Rizatriptan benzoate is a selective serotonin 5-HT_{1D} receptor agonist derived from tryptamine. Rizatriptan benzoate is a 5-HT₁ agonist triptan agent for the treatment of migraine headaches.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	50	127.72
Water	100	255.45

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.55 mL	12.77 mL	25.54 mL
5 mM	0.51 mL	2.55 mL	5.11 mL
10 mM	0.26 mL	1.28 mL	2.55 mL
50 mM	0.05 mL	0.25 mL	0.50 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

To be determined

In vivo study

1. Yao G, Han X, Hao T, Huang Q, Yu T. Effects of rizatriptan on the expression of calcitonin gene-related peptide and cholecystokinin in the periaqueductal gray of a rat migraine model. *Neurosci Lett.* 2015 Feb 5;587:29-34. doi: 10.1016/j.neulet.2014.12.021. Epub 2014 Dec 15. PMID: 25524408.
2. Fard JK, Hamzeiy H, Sattari M, Eftekhari A, Ahmadian E, Eghbal MA. Triazole rizatriptan Induces Liver Toxicity through Lysosomal/Mitochondrial Dysfunction. *Drug Res (Stuttg).* 2016 Sep;66(9):470-478. doi: 10.1055/s-0042-110178. Epub 2016 Jul 11. PMID: 27399851.

7. Bioactivity

Biological target:

Rizatriptan is an antagonist of 5-HT_{1B} and 5-HT_{1D} receptors (K_i = 4.3 and 10.1 nM, respectively). It is selective for 5-HT_{1B} and 5-HT_{1D} receptors over 5-HT_{1A} receptors (K_i = 140 nM). Rizatriptan induces vasoconstriction in isolated human middle meningeal arteries (EC₅₀ = 90 nM). Rizatriptan (50 and 75 mg/kg) reduces head grooming, the number of oculotemporal strokes, eye blinking, and one-eye closures in a Ca_v1.1 mutant transgenic mouse model of migraine.

Product data sheet



In vitro activity

To be determined

In vivo activity

mRNA and protein levels of calcitonin gene-related peptide and cholecystokinin in the periaqueductal gray of a rat migraine model were significantly reduced upon rizatriptan treatment.

Reference: Neurosci Lett. 2015 Feb 5;587:29-34. <https://pubmed.ncbi.nlm.nih.gov/25524408/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.