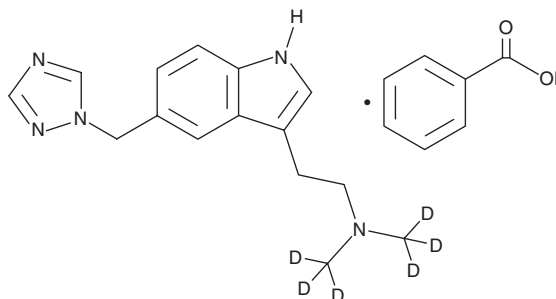


# PRODUCT INFORMATION



## Rizatriptan-d<sub>6</sub> (benzoate salt) Item No. 33369

**CAS Registry No.:** 1216984-85-8  
**Formal Name:** 2-((1H-1,2,4-triazol-1-yl)methyl)-1H-indol-3-yl)-N,N-bis(methyl-d<sub>3</sub>)ethan-1-amine, monobenzoate  
**MF:** C<sub>15</sub>H<sub>13</sub>D<sub>6</sub>N<sub>5</sub> • C<sub>7</sub>H<sub>6</sub>O<sub>2</sub>  
**FW:** 397.5  
**Chemical Purity:** ≥98% (Rizatriptan)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>6</sub>); ≤1% d<sub>0</sub>  
**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

Rizatriptan-d<sub>6</sub> (benzoate salt) is intended for use as an internal standard for the quantification of rizatriptan (Item No. 16475) 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).

Rizatriptan-d<sub>6</sub> (benzoate salt) is supplied as a solid. A stock solution may be made by dissolving the rizatriptan-d<sub>6</sub> (benzoate salt) in the solvent of choice, which should be purged with an inert gas. Rizatriptan-d<sub>6</sub> (benzoate salt) is soluble in DMSO.

### Description

Rizatriptan is an agonist of the serotonin (5-HT) receptor subtypes 5-HT<sub>1B</sub> and 5-HT<sub>1D</sub> (K<sub>i</sub>s = 4.3 and 10.1 nM, respectively).<sup>1</sup> It is selective for 5-HT<sub>1B</sub> and 5-HT<sub>1D</sub> receptors over 5-HT<sub>1A</sub> receptors (K<sub>i</sub> = 140 nM). Rizatriptan induces vasoconstriction in isolated human middle meningeal arteries (EC<sub>50</sub> = 90 nM).<sup>2</sup> *In vivo*, rizatriptan (50 and 75 mg/kg) reduces head grooming, the number of oculotemporal strokes, eye blinking, and one-eye closures in a *Cacna1a* mutant transgenic mouse model of migraine.<sup>3</sup> Formulations containing rizatriptan have been used in the treatment of migraine.

### References

- Xu, Y.-C., Schaus, J.M., Walker, C., *et al.* N-Methyl-5-*tert*-butyltryptamine: A novel, highly potent 5-HT<sub>1D</sub> receptor agonist. *J. Med. Chem.* **42**(3), 526-531 (1999).
- Longmore, J., Razzaque, Z., Shaw, D., *et al.* Comparison of the vasoconstrictor effects of rizatriptan and sumatriptan in human isolated cranial arteries: Immunohistological demonstration of the involvement of 5-HT<sub>1B</sub>-receptors. *Br. J. Clin. Pharmacol.* **46**(6), 577-582 (1998).
- Chanda, M.L., Tuttle, A.H., Baran, I., *et al.* Behavioral evidence for photophobia and stress-related ipsilateral head pain in transgenic *Cacna1a* mutant mice. *Pain* **154**(8), 1254-1262 (2013).

#### 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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