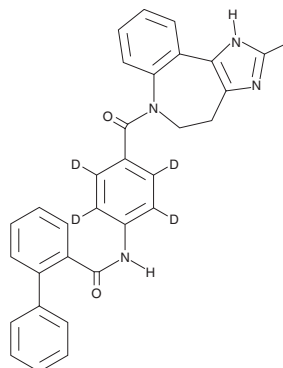


PRODUCT INFORMATION



Conivaptan-d₄ Item No. 26455

CAS Registry No.: 1129433-63-1
Formal Name: N-[4-[(4,5-dihydro-2-methylimidazo[4,5-d][1]benzazepin-6(1H)-yl)carbonyl]phenyl-d₄]-[1,1'-biphenyl]-2-carboxamide
MF: C₃₂H₂₂D₄N₄O₂
FW: 502.6
Chemical Purity: ≥98% (Conivaptan)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤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

Conivaptan-d₄ is intended for use as an internal standard for the quantification of conivaptan (Item No. 23728) 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).

Conivaptan-d₄ is supplied as a solid. A stock solution may be made by dissolving the conivaptan-d₄ in the solvent of choice, which should be purged with an inert gas. Conivaptan-d₄ is soluble in DMSO.

Description

Conivaptan is an antagonist of the arginine vasopressin (AVP) receptors V_{1A} and V₂ (K_is = 0.48 and 3.04 nM for rat liver V_{1A} and kidney V₂, respectively).¹ It also competitively inhibits oxytocin binding to rat uterine oxytocin receptors (K_i = 44 nM) but has no effect on AVP binding to anterior pituitary V_{1B} receptors at concentrations up to 100 μM in a radioligand binding assay. Conivaptan suppresses AVP-induced increases in intracellular calcium in vascular smooth muscle cells (VSMCs) *in vitro* and the pressor response in pithed rats. Conivaptan (0.01-0.3 mg/kg, i.v.) increases urine output and decreases urine osmolality in dehydrated conscious rats in a dose-dependent manner. It also reduces brain edema and blood-brain barrier disruption in a mouse experimental stroke model.²

References

1. Tahara, A., Tomura, Y., Wada, K.-I., *et al.* Pharmacological profile of YM087, a novel potent nonpeptide vasopressin V_{1A} and V₂ receptor antagonist, *in vitro* and *in vivo*. *J. Pharmacol. Exp. Ther.* **282**(1), 301-308 (1997).
2. Zeynalov, E., Jones, S.M., Seo, J.W., *et al.* Arginine-vasopressin receptor blocker conivaptan reduces brain edema and blood-brain barrier disruption after experimental stroke in mice. *PLoS One* **10**(8), e0136121 (2015).

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.

WARRANTY AND LIMITATION OF REMEDY

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