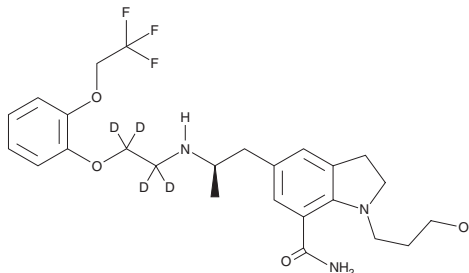


PRODUCT INFORMATION



Silodosin-d₄ Item No. 30236

CAS Registry No.: 1426173-86-5
Formal Name: (R)-1-(3-hydroxypropyl)-5-(2-((2-(2,2,2-trifluoroethoxy)phenoxy)ethyl)-1,1,2,2-d₄)amino)propyl)indoline-7-carboxamide
Synonym: KMD-3213-d₄
MF: C₂₅H₂₈D₄F₃N₃O₄
FW: 499.6
Chemical Purity: ≥98% (Silodosin)
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

Silodosin-d₄ is intended for use as an internal standard for the quantification of silodosin (Item No. 14866) 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).

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

Description

Silodosin is an α_{1A} -adrenergic receptor (α_{1A} -AR) antagonist ($K_i = 0.036$ nM).¹ It is 583- and 56-fold selective for α_{1A} - over α_{1B} - and α_{1D} -ARs, respectively. Silodosin inhibits phenylephrine-induced contraction of isolated rabbit prostate ($pA_2 = 10.05$) more potently than rabbit or rat aorta ($pA_{2S} = 9.36$ and 8.13, respectively).² It inhibits norepinephrine-induced contraction of isolated human prostate tissue when used at concentrations ranging from 0.3 to 10 nM.¹ Silodosin (0.01-1,000 μ g/kg) inhibits phenylephrine-induced increases in intraurethral pressure in rats.³ Formulations containing silodosin have been used in the treatment of benign prostatic hyperplasia.

References

1. Moriyama, N., Akiyama, K., Murata, S., *et al.* KMD-3213, a novel α_{1A} -adrenoceptor antagonist, potently inhibits the functional α_1 -adrenoceptor in human prostate. *Eur. J. Pharmacol.* **331(1)**, 39-42 (1997).
2. Yamagishi, R., Akiyama, K., Nakamura, S., *et al.* Effect of JMD-3213, an α_{1A} -adrenoceptor-selective antagonist, on the contractions of rabbit prostate and rabbit and rat aorta. *Eur. J. Pharm.* **315(1)**, 73-79 (1996).
3. Akiyama, K., Hora, M., Tatemichi, S., *et al.* KMD-3213, a uroselective and long-acting α_{1a} -adrenoceptor antagonist, tested in a novel rat model. *J. Pharmacol. Exp. Ther.* **291(1)**, 81-91 (1999).

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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