

Product Data Sheet

Product Name: Silodosin-d₄

Cat. No.: GC48079

Chemical Properties

Cas. No. 1426173-86-5

SMILES C[C@H](CC1=CC(C(N)=O)=C(N(CCCO)CC2)C2=C1)NC([2H])([2H])C([2H])([2H])OC3=CC=CC=C3OCC(F)(F)F

Formula C₂₅H₂₈D₄F₃N₃O₄

M.Wt 499.6

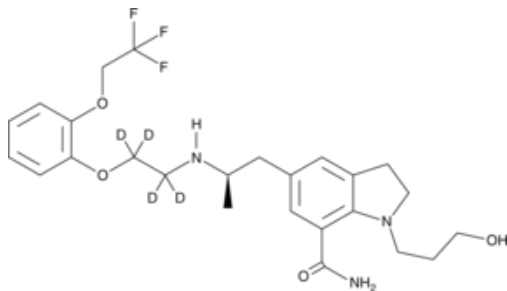
Solubility Methanol: soluble

Storage Store at -20°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution : ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



Background

Silodosin-d₄ is intended for use as an internal standard for the quantification of silodosin by GC- or LC-MS. Silodosin is an α_1 A-adrenergic receptor (α_1 A-AR) antagonist ($K_i = 0.036$ nM).¹ It is 583- and 56-fold selective for α_1 A- over α_1 B- and α_1 D-ARs, respectively. Silodosin inhibits phenylephrine-induced contraction of isolated rabbit prostate ($pA_2 = 10.05$) more potently than rabbit or rat aorta (pA_2 s = 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-

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

1,000 µg/kg) inhibits phenylephrine-induced increases in intraurethral pressure in rats.³ Formulations containing silodosin have been used in the treatment of benign prostatic hyperplasia.

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 prostateEur. 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 aortaEur. 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 modelJ. Pharmacol. Exp. Ther.291(1)81-91(1999)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA