

Product Data Sheet

Product Name: Moexipril-d5

Cat. No.: GC48469

Chemical Properties

Cas. No. 1356929-49-1

SMILES [2H]C1=C([2H])C([2H])=C([2H])C([2H])=C1CC[C@@H](C(OCC)=O)N[C@@H](C)C(N2CC3=CC(OC)=C(OC)C=C3C[C@H]2C(O)=O)=O

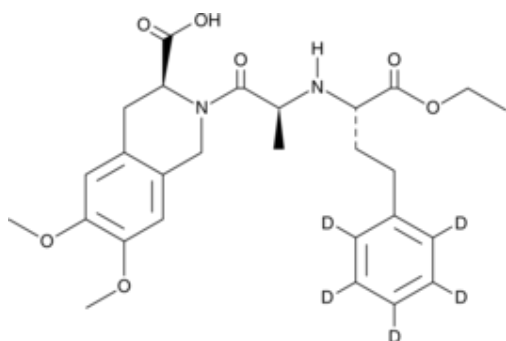
Formula C₂₇H₂₉D₅N₂O₇ M.Wt 503.6

Solubility DMSO: soluble, Methanol: soluble Storage -20°C

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

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

Structure



Background

Moexipril-d₅ intended for use as an internal standard for the quantification of moexipril by GC- or LC-MS. Moexipril is a prodrug form of the angiotensin converting enzyme (ACE) inhibitor moexiprilat.¹ It is converted to moexiprilat *in vivo* by side chain ester hydrolysis.² Moexipril inhibits ACE in a cell-free assay (IC₅₀ = 2.7 μM for the rabbit enzyme). It also inhibits phosphodiesterase 4 (IC₅₀s = 38, 160, and 230 μM for PDE4B2, PDE4A5 and PDE4D5, respectively).² Moexipril (0.1-30 mg/kg per day) reduces blood pressure in spontaneously hypertensive rats.¹ It also reduces infarct volume in a rat model of focal cerebral ischemia when used at a concentration of 0.01 mg/kg.³

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

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1. Edling, O., Bao, G., Feelisch, M., et al. Moexipril, a new angiotensin-converting enzyme (ACE) inhibitor: Pharmacological characterization and comparison with enalapril. *J. Pharmacol. Exp. Ther.* 275(2):854-863(1995)
2. Cameron, R.T., Coleman, R.G., Day, J.P., et al. Chemical informatics uncovers a new role for moexipril as a novel inhibitor of cAMP phosphodiesterase-4 (PDE4). *Biochem. Pharmacol.* 85(9):1297-1305(2013)
3. Ravati, A., Junker, V., Kouklevi, M., et al. Enalapril and moexipril protect from free radical-induced neuronal damage in vitro and reduce ischemic brain injury in mice and rats. *Eur. J. Pharmacol.* 373(1):21-33(1999)

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