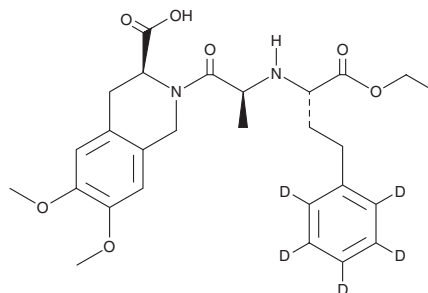


PRODUCT INFORMATION



Moexipril-d₅ Item No. 33814

CAS Registry No.: 1356929-49-1
Formal Name: (S)-2-(((S)-1-ethoxy-1-oxo-4-(phenyl-d₅)butan-2-yl)-L-alanyl)-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid
MF: C₂₇H₂₉D₅N₂O₇
FW: 503.6
Chemical Purity: ≥98% (Moexipril)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤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

Moexipril-d₅ is intended for use as an internal standard for the quantification of moexipril (Item No. 21255) 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).

Moexipril-d₅ is supplied as a solid. A stock solution may be made by dissolving the moexipril-d₅ in the solvent of choice, which should be purged with an inert gas. Moexipril-d₅ is soluble in methanol and DMSO.

Description

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

References

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., Kouklei, 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).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/17/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM