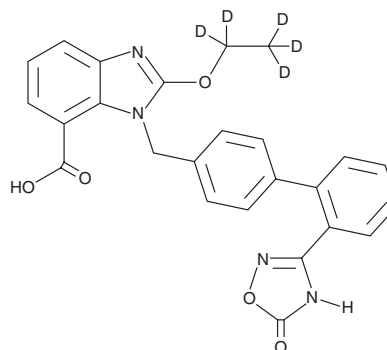


PRODUCT INFORMATION



Azilsartan-d₅ Item No. 33276

CAS Registry No.: 1346599-45-8
Formal Name: 2-(ethoxy-d₅)-1-((2'-(5-oxo-4,5-dihydro-1,2,4-oxadiazol-3-yl)-[1,1'-biphenyl]-4-yl)methyl)-1H-benzo[d]imidazole-7-carboxylic acid
MF: C₂₅H₁₅D₅N₄O₅
FW: 461.5
Chemical Purity: ≥98% (Azilsartan)
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

Azilsartan-d₅ is intended for use as an internal standard for the quantification of azilsartan (Item No. 26091) 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).

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

Description

Azilsartan is an antagonist of the angiotensin II type 1 receptor (AT₁; IC₅₀ = 0.42 μM) and the active metabolite of azilsartan medoxomil (Item No. 23805).^{1,2} Azilsartan is formed from azilsartan medoxomil by hydrolysis in the gastrointestinal tract and liver.³ Azilsartan also acts as an inverse agonist, inhibiting angiotensin II-induced accumulation of inositol-1-phosphate in COS-7 cells expressing recombinant human AT₁ (IC₅₀ = 2.6 nM).² It reduces the maximal contractile response induced by angiotensin II in isolated rabbit aortic strips (pD₂ = 9.9).² Azilsartan (100 ng/kg, i.v.) inhibits the angiotensin II-induced pressor response in conscious normotensive rats.²

References

1. Kohara, Y., Kubo, K., Imamiya, E., *et al.* Synthesis and angiotensin II receptor antagonistic activities of benzimidazole derivatives bearing acidic heterocycles as novel tetrazole bioisosteres. *J. Med. Chem.* **39(26)**, 5228-5235 (1996).
2. Ojima, M., Igata, H., Tanaka, M., *et al.* In vitro antagonistic properties of a new angiotensin type 1 receptor blocker, azilsartan, in receptor binding and function studies. *J. Pharmacol. Exp. Ther.* **336(3)**, 801-808 (2011).
3. Clas, S.-D., Sanchez, R.I., and Nofsinger, R. Chemistry-enabled drug delivery (prodrugs): Recent progress and challenges. *Drug Discov. Today* **19(1)**, 79-87 (2014).

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.

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