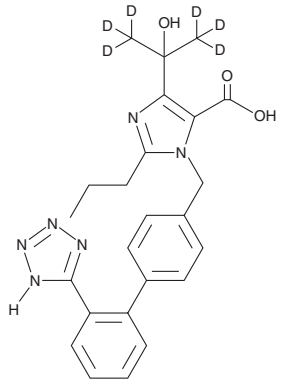
PRODUCT INFORMATION

Olmesartan-d_6

Item No. 36324



CAS Registry No.:	1185144-74-4
Formal Name:	4-[1-hydroxy-1-(methyl-d_3)ethyl-2,2,2-d_3]-2-propyl-1-[[2′-(2H-tetrazol-5-yl)[1,1′-biphenyl]-4-yl]methyl]-1H-imidazole-5-carboxylic acid
MF:	$C_{24}H_{20}D_6N_6O_3$
FW:	452.5
Chemical Purity:	≥95% (Olmesartan)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_6); ≤1% d_0
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

Olmesartan-d_6 is intended for use as an internal standard for the quantification of olmesartan (Item No. 23412) 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).

Olmesartan-d_6 is supplied as a solid. A stock solution may be made by dissolving the olmesartan-d_6 in the solvent of choice, which should be purged with an inert gas. Olmesartan-d_6 is soluble in DMSO.

Description

Olmesartan is a non-peptide angiotensin II receptor 1 (AT_1) antagonist (IC_{50} = 0.0077 µM for the bovine adrenal cortex receptor) and an active metabolite of olmesartan medoxomil (Item No. 11614).[1] It is formed from olmesartan medoxomil by paraoxonase 1 (PON1) in human plasma.[2] Olmesartan is selective for AT_1 over AT_2 (IC_{50} = >100 µM for the bovine cerebellar receptor). It reduces contraction of isolated guinea pig aorta induced by angiotensin II (Item No. 17150; pD_2 = 9.9) but not phenylephrine (Item Nos. 17205 | 18619) or potassium chloride. Olmesartan (0.01 and 0.03 mg/kg, i.v.) reduces the angiotensin II-induced pressor response in conscious normotensive rats.

References

1. Mizuno, M., Sada, T., Ikeda, M., *et al.* Pharmacology of CS-866, a novel nonpeptide angiotensin II receptor antagonist. *Eur. J. Pharmacol.* **285(2)**, 181-188 (1995).
2. Ishizuka, T., Fujimori, I., Nishida, A., *et al.* Paraoxonase 1 as a major bioactivating hydrolase for olmesartan medoxomil in human blood circulation: Molecular identification and contribution to plasma metabolism. *Drug Metab. Dispos.* **40(2)**, 374-380 (2012).

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