

Certificate of Analysis

Print Date: Nov 26th 2019

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Product Name: Olmesartan Catalog No.: 4616 Batch No.: 2

CAS Number: 144689-24-7

IUPAC Name: 4-(1-Hydroxy-1-methylethyl)-2-propyl-1-[[2'-(2*H*-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-1*H*-imidazole-5-carboxylic

acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{24}H_{26}N_6O_3.\frac{1}{2}H_2O$

Batch Molecular Weight: 455.51

Physical Appearance: White solid

Solubility: DMSO to 20 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.28 5.97 18.45 Found 62.96 5.86 18.45



Product Information

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acid

Description:

Potent angiotensin II type I (AT_1) receptor antagonist ($IC_{50} = 6.7$ nM at hAT_1 receptors). Improves cognitive function in a mouse model of hypertension- and hyperlipidemia-associated cognitive decline; ameliorates arterial stiffness in a rat model of chronic renal failure.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₄H₂₆N₆O₃.½H₂O

Batch Molecular Weight: 455.51 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Chuang *et al* (2012) Effects of olmes. on arterial stiffness in rats with chronic renal failure. Cardiovasc.Diabetol. *11* 66. PMID: 22694778. **Ojima** *et al* (2011) In vitro antagonistic properties of a new angiotensin type 1 receptor blocker, azilsartan, in receptor binding and function studies. J.Pharmacol.Exp.Ther. *336* 801. PMID: 21123673.

Mogi *et al* (2007) Inhibition of cognitive decline in mice fed a high-salt and cholesterol diet by the angiotensin receptor blocker, olmes. Neuropharmacology **53** 899. PMID: 18028965.