

**Product Name:** Olmesartan

**Catalog No.:** 4616

**Batch No.:** 1

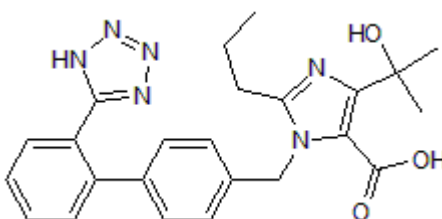
CAS Number: 144689-24-7

EC Number:

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<sub>24</sub>H<sub>26</sub>N<sub>6</sub>O<sub>3</sub>·H<sub>2</sub>O  
**Batch Molecular Weight:** 464.52  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 20 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	62.06	6.08	18.09
Found	62.18	6	18.33

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Potent angiotensin II type I (AT<sub>1</sub>) receptor antagonist (IC<sub>50</sub> = 6.7 nM at hAT<sub>1</sub> 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. Metabolite of Olmesartan medoxomil (Cat. No. 4620).

**Physical and Chemical Properties:**

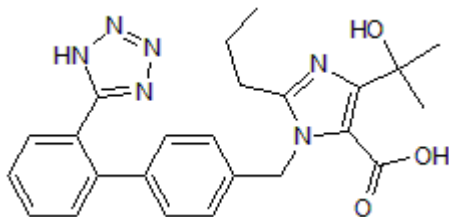
Batch Molecular Formula: C<sub>24</sub>H<sub>26</sub>N<sub>6</sub>O<sub>3</sub>.H<sub>2</sub>O

Batch Molecular Weight: 464.52

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

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

**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.

**Chuang et al (2012)** Effects of olmesartan on arterial stiffness in rats with chronic renal failure. *Cardiovasc.Diabetol.* **11** 66. PMID: 22694778.

**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.

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