

Certificate of Analysis

Print Date: Jan 14th 2016

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Product Name: Azilsartan Catalog No.: 4553 Batch No.: 1

CAS Number: 147403-03-0

IUPAC Name: 2-Ethoxy-1-[[2'-(4,5-dihydro-5-oxo-1,2,4-oxadiazol-3-yl)biphenyl-4-yl]methyl]benzimidazole-7-carboxylic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{20}N_4O_5$. $^{1/4}H_2O$

Batch Molecular Weight: 460.95

Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM

ethanol to 10 mM with gentle warming

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

Microanalysis:

HPLC: Shows 98.3% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Carbon Hydrogen Nitrogen

Theoretical 65.14 4.48 12.15 Found 65.19 4.31 12.21



Product Information

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Description:

Potent angiotensin II type 1 (AT_1) receptor inverse agonist (IC_{50} = 2.6 nM at the human AT_1 receptor). Inhibits angiotensin II-induced IP1 accumulation in COS-7 cells; decreases maximal contraction of rabbit aortic strips in a concentration-dependent manner (pD'_2 = 9.9). Antihypertensive; prevents vascular cell proliferation and expression of PAI-1.

Physical and Chemical Properties:

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Batch Molecular Weight: 460.95 Physical Appearance: Off-white solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 mM with gentle warming

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:

Kajiya et al (2011) Molecular and cellular effects of azilsartan: a new generation angiotensin II receptor blocker. J.Hypertens. 29 2476. PMID: 21986624.

French *et al* (2011) The angiotensin receptor blocker, azilsartan medoxomil (TAK-491), suppresses vascular wall expression of plasminogen activator inhibitor type-I protein potentially facilitating the stabilization of atherosclerotic plaques. J.Cardiovasc.Pharmacol. *58* 143. PMID: 21558880.

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.