

Certificate of Analysis

Print Date: Jan 15th 2016 **WWW.tocris.com**

Product Name: Valsartan Catalog No.: 4216 Batch No.: 1

CAS Number: 137862-53-4

IUPAC Name: (S)-3-methyl-2-[N-({4-[2-(2H-1,2,3,4-tetrazol-5-yl)phenyl]phenyl}methyl)pentanamido]butanoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{24}H_{29}N_5O_3.^{3}4H_2O$

Batch Molecular Weight: 449.03 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = -65.2$ (Concentration = 1, Solvent = Methanol)

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 64.2 6.85 15.6 Found 64.2 6.74 15.73



Product Information

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Description:

High affinity AT_1 receptor antagonist ($K_i = 2.38$ nM). Displays 30,000-fold selectivity over AT₂ receptors. Inhibits angiotensin IIinduced release of aldosterone in vitro. Orally active.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₄H₂₉N₅O₃.34H₂O

Batch Molecular Weight: 449.03 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 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:

Criscione et al (1993) Pharmacological profile of valsartan: a potent, orally active, nonpeptide antagonist of the angiotensin II AT₁receptor subtype. Br.J.Pharmacol. 110 761. PMID: 8242249.

Wexler et al (1996) Nonpeptide angiotensin II receptor antagonists: the next generation in antihypertensive therapy. J.Med.Chem. 39 625. PMID: 8576904.

Hanafy et al (2008) Effects of angiotensin II blockade on inflammation-induced alterations of pharmacokinetics and pharmacodynamics of calcium channel blockers. Br.J.Pharmacol. 153 90. PMID: 17965735.

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