

# Valsartan

**Catalog No: tcsc1967**



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

137862-53-4

**Formula:**

$C_{24}H_{29}N_5O_3$

**Pathway:**

GPCR/G Protein

**Target:**

Angiotensin Receptor

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 100$  mg/mL (229.61 mM)

**Alternative Names:**

CGP 48933

**Observed Molecular Weight:**

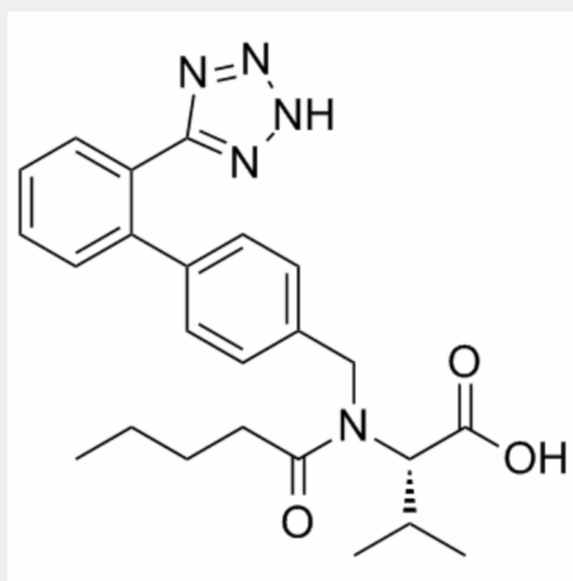
435.52

## Product Description

Valsartan (CGP-48933) is an **angiotensin II** receptor antagonist for treatment of high blood pressure and heart failure.

**In Vitro:** Valsartan is a synthetic non-peptide angiotensin II type 1 receptor antagonist that dilates blood vessels and reduces blood pressure by blocking the action of angiotensin. Valsartan significantly decreases the expression of AT1R in ageing aorta endothelial cells<sup>[1]</sup>. The pretreatment of valsartan results in an inhibition of TLR2 signaling and proinflammatory cytokines. The expression of AGTR1 is up-regulated after alcohol exposure, and is blocked by valsartan pretreatment<sup>[2]</sup>.

**In Vivo:** Valsartan significantly attenuates the expression of TGF- $\beta$ /Smad, Hif-1 $\alpha$  and fibrosis-related protein in rats after MI. Heart function, infarcted size, wall thickness as well as myocardial vascularization of ischaemic hearts are also significantly improved by valsartan compared with saline and hydralazine<sup>[3]</sup>. Valsartan partially reverses the effects of high-salt diet on hypertension, cardiac injuries such as fibrosis and inflammatory cell infiltration, and inhibition of aquaporin 1 and angiogenic factors; valsartan alone does not exert such effects<sup>[4]</sup>. Valsartan is an effective antidepressant/antianxiety reagent and can promote the hippocampal neurogenesis and expression of BDNF. Chronic administration of valsartan (5-40 mg/kg/d, p.o.) increases the time spent in the center of the field in OFT and the latency to eat in NSF, reduces the immobility time in both TST and FST, and increases the sucrose preference in SPT<sup>[5]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!