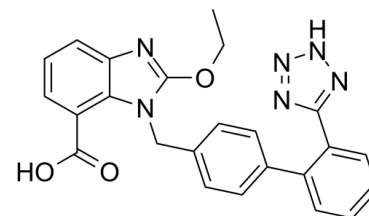


## Data Sheet

<b>Product Name:</b>	Candesartan
<b>Cat. No.:</b>	CS-2146
<b>CAS No.:</b>	139481-59-7
<b>Molecular Formula:</b>	C <sub>24</sub> H <sub>20</sub> N <sub>6</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	440.45
<b>Target:</b>	Angiotensin Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Solubility:</b>	H <sub>2</sub> O : < 0.1 mg/mL (insoluble); DMSO : ≥ 100 mg/mL (227.04 mM)



### BIOLOGICAL ACTIVITY:

Candesartan is an angiotensin II receptor antagonist with IC<sub>50</sub> of 0.26 nM. Target: Angiotensin II Receptor candesartan is indicated for the treatment of hypertension. Results from the CHARM study in the early 2000s demonstrated the morbidity and mortality reduction benefits of candesartan therapy in congestive heart failure. Thus, while ACE inhibitors are still considered first-line therapy in heart failure, candesartan can be used in combination with an ACE to achieve improved mortality and morbidity vs. an ACE alone and additionally is an alternative in patients intolerant of ACE inhibitor therapy. Candesartan (0.5 mg/kg) decreases blood pressure and inhibits AT<sub>1</sub> binding in the subfornical organ (SFO), paraventricular nucleus of the hypothalamus (PVN), nucleus of the solitary tract (NTS) and area postrema (AP) in WKY rats. Candesartan (0.3 mg/kg) pretreatment decreases the infarct area by 31% in adult spontaneously hypertensive rats, reduces the CBF decrease at the peripheral area of ischemia and the cortical volume of severe ischemic lesion.

### References:

- [1]. Pfeffer MA, et al. Effects of candesartan on mortality and morbidity in patients with chronic heart failure: the CHARM-Overall programme. *Lancet*. 2003 Sep 6;362(9386):759-66.
- [2]. Nishimura Y, et al. Chronic peripheral administration of the angiotensin II AT<sub>1</sub> receptor antagonist candesartan blocks brain AT<sub>1</sub> receptors. *Brain Res*. 2000 Jul 14;871(1):29-38.

### CAIndexNames:

1H-Benzimidazole-7-carboxylic acid, 2-ethoxy-1-[[2'-(2H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-

### SMILES:

O=C(C1=C2C(N=C(OCC)N2CC3=CC=C(C4=CC=CC=C4C5=NNN=N5)C=C3)=CC=C1)O

**Caution: Product has not been fully validated for medical applications. For research use only.**

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