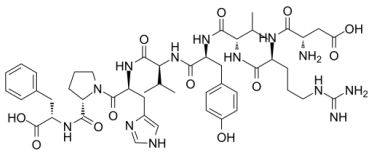
Data Sheet

Product Name:	Angiotensin II 5-valine
Cat. No.:	CS-5786
CAS No.:	58-49-1
Molecular Formula:	C49H69N13O12
Molecular Weight:	1032.15
Target:	Angiotensin Receptor
Pathway:	GPCR/G Protein
Solubility:	H2O : ≥ 257.5 mg/mL (249.48 mM)



BIOLOGICAL ACTIVITY:

Angiotensin II 5-valine is an agonist of **angiotensin receptor**. IC50 & Target: Angiotensin receptor[1]. **In Vivo:** By day 12, systolic blood pressure (SBP) increases significantly in Angiotensin II 5-valine infused rats (197±7 mm Hg). As shown, the development of hypertension in ANG II infused rats is prevented by losartan treatment. Blood and kidney samples are harvested, subjected to HPLC to separate Angiotensin II 5-valine (exogenous) from Ile5-ANG II (endogenous) and the fractions are measured by radioimmunoassay. In the Angiotensin II 5-valine infused rats treated with losartan, total plasma ANG II levels are elevated to a greater extent than in rats not treated with losartan (289±20 v 119±14 fmol/mL). However, losartan markedly decrease by 88% the enhancement of intrarenal Val5-ANG II content that occurred in the rats infused with Val5-ANG II alone[1].

PROTOCOL (Extracted from published papers and Only for reference)

Animal Administration: [1]Rats[1]

Male Sprague Dawley **rats** are uninephrectomized and divided into three groups: control (n=6), Angiotensin II 5-valine (exogenous form) infused (n=8), and **Angiotensin II 5-valine** infused rats treat with losartan (n=8). Angiotensin II 5-valine, which has the same biological and immunoreactive properties as endogenous ANG II, was infused at 40 ng/min via an osmotic minipump implant subcutaneously[1].

References:

[1]. Zou LX et al. Renal uptake of circulating angiotensin II in Val5-angiotensin II infused rats is mediated by AT1 receptor. Am J Hypertens. 1998 May;11(5):570-8.

CAIndexNames:

Angiotensin II, 5-L-valine-

SMILES:

O=C(N(CCC1)[C@@H]1C(N[C@H](C(O)=O)CC2=CC=CC=C2)=O)[C@@H](NC([C@H](C(C)C)NC([C@@H](NC([C@H](C(C)C)NC([C@H](CCCNC(N)=N)NC([C@@H](N)CC(O)=O)=O)=O)=O)CC3=CC=C(O)C=C3)=O)=O)CC4=CNC=N4

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

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