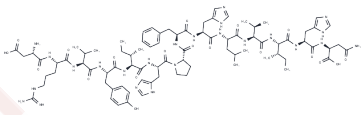
Data Sheet (Cat.No.TP1842)

TargetMol

Angiotensinogen (1-14), human

Chemical Properties



CAS No. : 104180-23-6

Formula: C83H122N24O19

Molecular Weight: 1760.01

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Angiotensinogen (1-14), human, also known as angiotensin precursor, is a serum globulin synthesized by the liver that is hydrolyzed by renin to form angiotensin I,
Targets(IC50)	Others,Endogenous Metabolite
In vitro	Angiotensinogen (1-14), human (AGT), the common precursor of the angiotensin peptide family, consists of 485 amino acids in humans, with the N-terminal 33 amino acids serving as a signal peptide. Renin specifically cleaves amino acids 34-43 (the 10th residue after the signal peptide is removed) to release angiotensin I (AngI), which then generates a variety of bioactive peptides through a cascade reaction. Notably, this enzymatic cleavage mechanism is conserved across species—most mammalian AGTs can be recognized and cleaved by human renin, and synthetic peptides containing only the N-terminal sequence can mimic the function of the natural substrate. This property suggests that the N-terminal domain of AGT plays a crucial role in renin recognition. [1-2]

Solubility Information

Solubility	H2O: ≥ 4.8 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5682 mL	2.8409 mL	5.6818 mL
5 mM	0.1136 mL	0.5682 mL	1.1364 mL
10 mM	0.0568 mL	0.2841 mL	0.5682 mL
50 mM	0.0114 mL	0.0568 mL	0.1136 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Burton J, et al. The amino-acid residues on the C-terminal side of the cleavage site of angiotensinogeninfluence the species specificity of reaction with renin. iochim Biophys Acta. 1988 Jan 4;952(1):8-12.
Lu H, et al. Structure and functions of angiotensinogen. Hypertens Res. 2016 Jul;39(7):492-500.