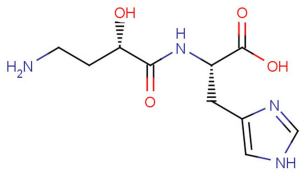
Data Sheet (Cat.No.T10684)

TargetMol
A DRUG SCREENING EXPERT

Carnostatine

Chemical Properties



CAS No.:	T10684
Formula:	C10H16N4O4
Molecular Weight:	256.26
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Carnostatine (SAN9812) is a potent and selective carnosinase 1 (CN1) inhibitor (Ki: 11 nM for recombinant hCN1) and can be used for the treatment of diabetic nephropathy.
Targets(IC_{50})	human CN1(ki): ki： 11 nM
In vitro	Carnostatine also inhibits CN1 activity in human serum and serum of transgenic mice-overexpressing human CN1. At a carnosine concentration of 200 μM, the IC50 value of Carnostatine is 18 nM on human recombinant CN1.
In vivo	Carnostatine (30 mg/kg, s.c.) leads to a sustained reduction in circulating CN1 activity in human CN1 transgenic (TG) mice. Simultaneous administration of Carnosine and Carnostatine increases carnosine levels in plasma and kidney by up to 100-fold compared to treatment-naïve CN1-overexpressing mice.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.902 mL	19.511 mL	39.023 mL
5 mM	0.78 mL	3.902 mL	7.805 mL
10 mM	0.39 mL	1.951 mL	3.902 mL
50 mM	0.078 mL	0.39 mL	0.78 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Qiu J, et al. Identification and characterisation of carnostatine (SAN9812), a potent and selective carnosinase (CN1) inhibitor with in vivo activity. Amino Acids. 2019 Jan;51(1):7-16.

Inhibitors · Natural Compounds · Compound Libraries

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481