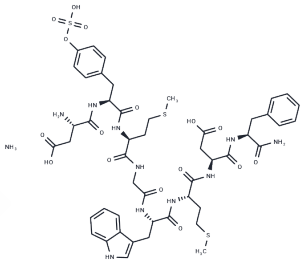
Data Sheet (Cat.No.TP1198)

TargetMol

Sincalide ammonium

Chemical Properties



CAS No. : 70706-98-8

Formula: C49H65N11O16S3

Molecular Weight: 1160.3

Appearance: no data available

Storage: store at low temperature,keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Sincalide ammonium (CCK-8 ammonium) is a potent analog of the amino acid peptide hormone cholecystokinin (CCK), an active fragment that retains much of the biological activity of CCK.Sincalide ammonium promotes bile secretion, causes gallbladder contractions and relaxes the sphincter of Oddi, thereby facilitating bile drainage into the duodenum. Sincalide ammonium promotes bile secretion, contraction of the gallbladder and relaxation of the sphincter of Oddi, thereby facilitating the drainage of bile into the duodenum.Sincalide ammonium can be injected to promote gallbladder contraction, and is commonly used as an adjunct in the diagnosis of gallbladder and pancreatic diseases and in cholecystography.
Targets(IC50)	Cholecystokinin Receptor
In vitro	Sincalide ammonium, also known as cholecystokinin octapeptide ammonium or CCK-8 ammonium, functions as a novel cardiovascular hormone with a significant inhibitory effect on myocardial fibrosis in noninfarcted areas. It also exhibits a positive role in combating inflammation, apoptosis, and collagen deposition. In the context of H9c2 cardiomyoblasts, CCK-8 (ammonium) protects cells from Ang II-induced apoptosis, partly through the activation of the CCK1 receptor and the phosphatidylinositol-3 kinase/protein kinase B (PI3K/Akt) signaling pathway[4].
In vivo	In a rat model of myocardial infarction (MI), Sincalide ammonium, also known as cholecystokinin octapeptide ammonium or CCK-8 ammonium, alleviates fibrosis in the noninfarcted regions. Furthermore, it delays left ventricular remodeling and the progression of heart failure in the MI rat model[3].

Solubility Information

Solubility	H2O: 30 mg/mL (25.86 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.8618 mL	4.3092 mL	8.6185 mL
5 mM	0.1724 mL	0.8618 mL	1.7237 mL
10 mM	0.0862 mL	0.4309 mL	0.8618 mL
50 mM	0.0172 mL	0.0862 mL	0.1724 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.

Reference

Maher KA. Kinevac (sincalide for injection)/Squibb Diagnostics. Gastroenterol Nurs. 1991 Oct;14(2):98-100.
Ziessman HA. Sincalide: A Review of Clinical Utility, Proper Infusion Methodology, and Alternative Cholecystogogues. J Nucl Med Technol. 2019 Sep;47(3):210-212.
Can Wang, et al. Cholecystokinin octapeptide reduces myocardial fibrosis and improves cardiac remodeling in post myocardial infarction rats. Int J Biochem Cell Biol. 2020 Aug;125:105793.
Can Wang, et al. Protective effect of cholecystokinin octapeptide on angiotensin II-induced apoptosis in H9c2 cardiomyoblast cells. J Cell Biochem. 2020 Jul;121(7):3560-3569.