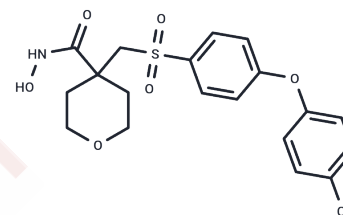


CTS-1027

Chemical Properties

CAS No. : 193022-04-7
 Formula: C₁₉H₂₀ClNO₆S
 Molecular Weight: 425.88
 Storage: 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	CTS-1027 is a small molecule inhibitor of MMPs (IC ₅₀ s: 0.3 nM, 0.5 nM for MMP2, MMP13). It has > 1,000 fold selectivity over MMP1.
Targets(IC ₅₀)	MMP,Others
In vivo	CTS-1027 improves overall animal survival following 14 days of BDL in mice [1]. CTS-1027 effectively reduces features of cholestatic liver injury, the hepatocyte apoptosis, and markers of hepatic fibrogenesis in the BDL mouse. The terminal plasma concentration of RS-130830 is 311 nM, in male animals treated for 8 weeks. RS-130830(8 weeks; male mice) treatment causes an 89% increase in plasma triglyceride concentration. But there is no corresponding effect in female mice treated for 12 weeks. The plaque lipid content of animals receiving RS-130830 is increased by 81% at 12 weeks, and increased by 41% at 16 weeks [2].

Solubility Information

Solubility	DMSO: 100 mg/mL (234.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 3.3 mg/mL (7.75 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3481 mL	11.7404 mL	23.4808 mL
5 mM	0.4696 mL	2.3481 mL	4.6962 mL
10 mM	0.2348 mL	1.174 mL	2.3481 mL
50 mM	0.047 mL	0.2348 mL	0.4696 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

Kahraman A, et al. Matrix metalloproteinase inhibitor, CTS-1027, attenuates liver injury and fibrosis in the bile duct-ligated mouse. *Hepatol Res.* 2009 Aug;39(8):805-813.

Johnson JL, et al. Effect of broad-spectrum matrix metalloproteinase inhibition on atherosclerotic plaque stability. *Cardiovasc Res.* 2006 Aug 1;71(3):586-595.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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