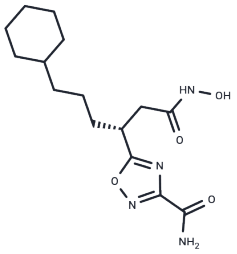
Data Sheet (Cat.No.T6064)

TargetMol

UK-383367

Chemical Properties



CAS No. : 348622-88-8

Formula: C15H24N4O4

Molecular Weight: 324.38

Storage: Keep away from direct sunlight,Store at low temperature
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	UK-383367 is a procollagen C-proteinase inhibitor with IC50 of 44 nM, has excellent selectivity over MMPs.
Targets(IC50)	Procollagen C Proteinase
In vitro	UK-383367 is effective at penetrating human skin. [1] UK-383367 inhibits collagen deposition with IC50 of ~2 μM. UK-383367 has modest affinity for all the PDE-4 subtypes PDE-4a, PDE-4b, PDE-4c and PDE-4d with IC50 of 1.8 μM, 1.5 μM, 2.4 μM and 0.9 μM, respectively. [2] UK-383367 is a weakly acidic compound and lipophilic. [3]
In vivo	Plasma protein binding values for UK-383367 in rat, dog and human are 95%, 93% and 94%, respectively. UK-383367 following incubation in rat plasma results in the half-life of 49?min. UK-383367 following single intravenous administration (2 mg/kg) to rat results in the plasma clearance of 157?mL min?1?kg?1, the volume of distribution of 12?L kg?1, and an elimination half-life of 0.8? hour. UK-383367 following single intravenous administration (0.5 mg/kg) to dog results in the plasma clearance of 35?mL min?1?kg?1, the volume of distribution of 4.6?L kg?1, and an elimination half-life of 1.5?hours. UK-383367 following oral administration (2 mg/kg) to dog results in Cmax of 110 ng/mL, Tmax of 0.5-1.5 hour and oral bioavilability of 13%. [3]

Solubility Information

Solubility	Ethanol: 65 mg/mL (200.38 mM),Sonication is recommended. DMSO: 65 mg/mL (200.38 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.17 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0828 mL	15.414 mL	30.828 mL
5 mM	0.6166 mL	3.0828 mL	6.1656 mL
10 mM	0.3083 mL	1.5414 mL	3.0828 mL
50 mM	0.0617 mL	0.3083 mL	0.6166 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

Fish PV, et al. J Med Chem, 2007, 50(15), 3442-3456.
Bailey S, et al. Bioorg Med Chem Lett, 2008, 18(24), 6562-6567.
Allan GA, et al. Xenobiotica, 2006, 36(5), 399-418.