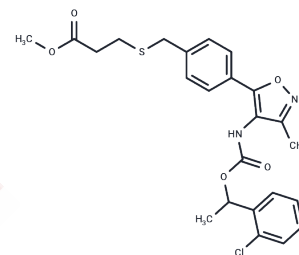


Ki16198

## Chemical Properties

CAS No. :	355025-13-7
Formula:	C <sub>24</sub> H <sub>25</sub> ClN <sub>2</sub> O <sub>5</sub> S
Molecular Weight:	488.98
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	Ki16198 is an orally available LPA receptor antagonist and is a methyl ester derivative of Ki16425. It inhibits LPA1- and LPA3-induced inositol phosphates with Ki values of 0.34 and 0.93 $\mu$ M, respectively, and can be used in studies of pancreatic carcinogenesis and metastasis.
Targets(IC50)	LPA Receptor, LPL Receptor
In vitro	Saxagliptin has an inhibition constant Ki of 1.3 nM for DPP4 inhibition, which is 10-fold more potent than either vildagliptin or sitagliptin (another two DPP4 inhibitors) with Ki of 13 and 18 nM. In addition, Saxagliptin demonstrates greater specificity for DPP4 than for either the DPP8 or DPP9 enzymes (400- and 75- fold, respectively). The active metabolite of saxagliptin is two-fold less potent than the parent. Both Saxagliptin and its metabolite are highly selective (>4000-fold) for the prevention of DPP4 compared with a range of other proteases (selectivity of sitagliptin and vildagliptin for DPP4 is >2600 and <250-fold, respectively, compared with DPP8 and DPP9). [2] Saxagliptin reduces the degradation of the incretin hormone glucagon-like peptide-1, thereby enhancing its actions, and is associated with improved $\beta$ -cell function and suppression of glucagon secretion. [3]

## Solubility Information

Solubility	DMSO: 50 mg/mL (102.25 mM), Sonication is recommended. Ethanol: 33 mg/mL (67.49 mM), Sonication is recommended. H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.11 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

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.0451 mL	10.2254 mL	20.4507 mL
5 mM	0.409 mL	2.0451 mL	4.0901 mL
10 mM	0.2045 mL	1.0225 mL	2.0451 mL
50 mM	0.0409 mL	0.2045 mL	0.409 mL

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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

Komachi M, et al. *Cancer Sci*, 2012, 103(6), 1099-1104.

Shano S, et al. *Biochim Biophys Acta*, 2008, 1783(5), 748-759.

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