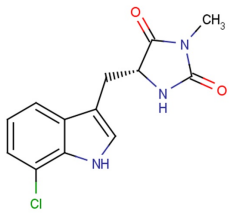
Data Sheet (Cat.No.T12203L)

TargetMol
A DRUG SCREENING EXPERT

Necrostatin 2

Chemical Properties



CAS No.:	852391-19-6
Formula:	C13H12ClN3O2
Molecular Weight:	277.71
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Necrostatin 2 is an effective necroptosis inhibitor. Necrostatin 2 is also a RIPK1 inhibitor. EC50 for inhibition of necroptosis in FADD-deficient Jurkat T cells treated with TNF-α is 0.05 μM.
Targets(IC_{50})	Necroptosis: None
In vitro	Necrostatin 2 displays activity in a broad range of necroptosis cellular systems[1]. Necrostatin 2 at 30 μM fully protects L929 cells from TNF-α-induced necroptosis. In addition to TNF-α, the pan-caspase inhibitor benzyloxycarbonyl-Val-Ala-Asp(OMe)-fluoromethylketone (zVAD.fmk) has also been found to induce necrosis in L929 cells, which is efficiently inhibited by Necrostatin 2[2]. Evaluation of necroptosis inhibitory activity is performed using a FADD-deficient variant of human Jurkat T cells treated with TNF-α. Utilizing these conditions the cells efficiently undergo necroptosis, which is completely and selectively inhibited by Necrostatin 2 (EC50=50 nM). EC50 for inhibition of necroptosis in FADD-deficient Jurkat T cells treated with TNF-α is 0.05 μM[3].

Solubility Information

Solubility	DMSO: 100 mg/mL (360.09 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.601 mL	18.004 mL	36.009 mL
5 mM	0.72 mL	3.601 mL	7.202 mL
10 mM	0.36 mL	1.8 mL	3.601 mL
50 mM	0.072 mL	0.36 mL	0.72 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. Teng X, et al. Structure-activity relationship study of [1,2,3]thiadiazole necroptosis inhibitors. Bioorg Med Chem Lett. 2007 Dec 15;17(24):6836-40.

2. Jagtap PG, et al. Structure-activity relationship study of tricyclic necroptosis inhibitors. J Med Chem. 2007 Apr 19;50(8):1886-95.

3. Teng X, et al. Structure-activity relationship study of novel necroptosis inhibitors. Bioorg Med Chem Lett. 2005 Nov 15;15(22):5039-44.

4. Takahashi N, et al. Necrostatin-1 analogues: critical issues on the specificity, activity and in vivo use in experimental disease models. Cell Death Dis. 2012 Nov 29;3:e437.

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