ML132

Cat. No.: HY-12412

CAS No.: 1230628-71-3

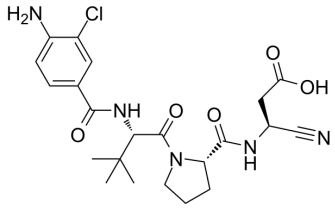
Molecular Formula: $C_{22}H_{28}ClN_5O_5$

Molecular Weight: 477.94

Target: Caspase

Pathway: Apoptosis111

Storage: -80°C, protect from light, stored under nitrogen



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (523.08 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0923 mL	10.4616 mL	20.9231 mL
	5 mM	0.4185 mL	2.0923 mL	4.1846 mL
	10 mM	0.2092 mL	1.0462 mL	2.0923 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 7 mg/mL (14.65 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 6.25 mg/mL (13.08 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 6.25 mg/mL (13.08 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

ML132 (NCGC-00183434) is a selective caspase 1 inhibitor with an IC_{50} of 34.9 nM. ML132 shows good stability that can be utilized as molecular probes of caspase 1. ML132 can be used for research in the field of anti-cancer and anti-inflammatory[1].

IC_{50} & Target

Caspase-1 34.9 nM (IC_{50})	Caspase-4 1.27 μM (IC_{50})	Caspase-5 0.85 μM (IC_{50})	Caspase-8 4.18 μM (IC_{50})
Caspase-9 2.85 μM (IC_{50})			

REFERENCES

[1]. Adriaenssens Y, et al. Carboxylate isosteres for caspase inhibitors: the acylsulfonamide case revisited. Org Biomol Chem. 2017 Sep 13;15(35):7456-7473.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA