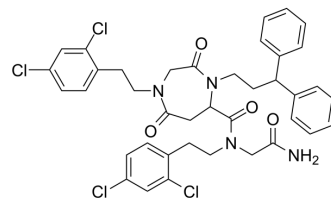


QM31

Cat. No.:	HY-125018		
CAS No.:	937735-00-7		
Molecular Formula:	C ₃₉ H ₃₈ Cl ₄ N ₄ O ₄		
Molecular Weight:	768.56		
Target:	Caspase		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (162.64 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.3011 mL	6.5057 mL	13.0113 mL
	5 mM	0.2602 mL	1.3011 mL	2.6023 mL
	10 mM	0.1301 mL	0.6506 mL	1.3011 mL

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

BIOLOGICAL ACTIVITY

Description

QM31 (SVT016426), a cytoprotective agent, is a selective inhibitor of Apaf-1. QM31 inhibits the formation of the apoptosome (IC₅₀=7.9 μM), the caspase activation complex composed by Apaf-1, cytochrome c, dATP and caspase-9. QM31 exerts mitochondrioprotective functions and interferes with the intra-S-phase DNA damage checkpoint^{[1][2]}.

In Vitro

SVT016426 (0.5-2 μM) inhibits Apaf1-induced activation of caspase activity with an IC₅₀ of 5 μM in HeLa S100 cells^[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Mondragón L, et al. A chemical inhibitor of Apaf-1 exerts mitochondrioprotective functions and interferes with the intra-S-phase DNA damage checkpoint. *Apoptosis*. 2009 Feb;14(2):182-90.
- [2]. Orzáez M, et al. Apaf-1 inhibitors protect from unwanted cell death in in vivo models of kidney ischemia and chemotherapy induced ototoxicity. *PLoS One*. 2014 Oct 20;9(10):e110979.

Caution: Product has not been fully validated for medical applications. For research use only.

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