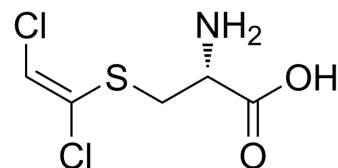


DCVC

Cat. No.:	HY-19717		
CAS No.:	13419-46-0		
Molecular Formula:	C ₅ H ₇ Cl ₂ NO ₂ S		
Molecular Weight:	216.09		
Target:	TNF Receptor		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 2.5 mg/mL (11.57 mM; Need ultrasonic)
 H₂O : 1.034 mg/mL (4.79 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		4.6277 mL	23.1385 mL	46.2770 mL
	5 mM		0.9255 mL	4.6277 mL	9.2554 mL
	10 mM		0.4628 mL	2.3139 mL	4.6277 mL

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

BIOLOGICAL ACTIVITY

Description

DCVC (S-[(1E)-1,2-dichlorovinyl]-L-cysteine) is a bioactive metabolite of trichloroethylene (TCE). DCVC inhibits pathogen-stimulated pro-inflammatory cytokines IL-1 β , IL-8, and TNF- α release from tissue cultures^{[1][2]}.

In Vitro

Extraplacental membranes are cultured for 4, 8, and 24h with the trichloroethylene (TCE) metabolite S-(1,2-dichlorovinyl)-L-cysteine (DCVC) in the absence or presence of lipoteichoic acid (LTA) or lipopolysaccharide (LPS) to simulate infection. In addition, membranes were cocultured with DCVC and Group B Streptococcus (GBS). DCVC (5-50 μ M) significantly inhibited LTA-, LPS-, and GBS-stimulated cytokine release from tissue cultures as early as 4h. DCVC inhibits pathogen-stimulated cytokine (IL-1 β , IL-8, and TNF- α) release in a concentration-dependent manner^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Boldenow E, et al. The trichloroethylene metabolite S-(1,2-dichlorovinyl)-L-cysteine but not trichloroacetate inhibits pathogen-stimulated TNF- α in human

extraplacental membranes in vitro. *Reprod Toxicol.* 2015 Apr;52:1-6.

[2]. Lash LH, et al. Multigenerational study of chemically induced cytotoxicity and proliferation in cultures of human proximal tubular cells. *Int J Mol Sci.* 2014 Nov 18;15(11):21348-65.

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