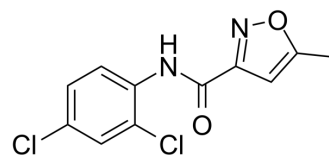


UTL-5g

Cat. No.:	HY-117082		
CAS No.:	646530-37-2		
Molecular Formula:	C ₁₁ H ₈ Cl ₂ N ₂ O ₂		
Molecular Weight:	271.1		
Target:	TNF Receptor		
Pathway:	Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (368.87 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.6887 mL	18.4434 mL	36.8868 mL
		5 mM	0.7377 mL	3.6887 mL	7.3774 mL
10 mM		0.3689 mL	1.8443 mL	3.6887 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.22 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	UTL-5g (GBL-5g), an anti-inflammatory TNF-α inhibitor, has chemoprotective and liver radioprotective effects. UTL-5g lowers hepatotoxicity, nephrotoxicity, and myelotoxicity induced by Cisplatin through TNF-α inhibition among other factors [1][2].
In Vitro	RAW 264.7 macrophages are transfected with the respective reporter assay plasmids, pretreated with UTL-5g at 1, 10 or 50 μM for 60 min and then challenged with 100 ng/ml LPS. After a 16 h incubation, transcription factor activity is measured. Transcription factors that shows a UTL-5g dose-dependent decrease in activity in two experiments are categorized as being disrupted by UTL-5g. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	UTL-5g (GBL-5g) lowers levels of TGF-β and TNF-α elevated by lung irradiation ^[1] . UTL-5g (60 mg/kg; p.o.; daily for 4 days) shows positive effects in increasing the survival rates and extending the survival

times^[3].

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

Animal Model:	C57BL/6, male mice (8-10 weeks) ^[1]
Dosage:	15, 30, and 60 mg/kg
Administration:	I.p.; before irradiation, daily x 5
Result:	Blood levels of TGF- β were lowered.

Animal Model:	BDF1 female mice ^[3]
Dosage:	P.o.; daily for 4 days
Administration:	60 mg/kg (30 min before i.p. injection of Cisplatin at 10, 15, and 20 mg/kg respectively on Day 0)
Result:	Increased the survival rate and delayed the time to death for mice treated with 150% of the maximum tolerated dose (MTD) of Cisplatin (15 mg/kg). At 200% of the MTD of Cisplatin (20 mg/kg), treatment of UTL-5g increased the survival rate and delayed the time to death.

REFERENCES

[1]. Stephen Brown, et al. UTL-5g Lowers Levels of TGF- β and TNF- α Elevated by Lung Irradiation

[2]. Carruthers NJ, et al. Phosphoproteome and transcription factor activity profiling identify actions of the anti-inflammatory agent UTL-5g in LPS stimulated RAW 264.7 cells including disrupting actin remodeling and STAT-3 activation. *Eur J Pharmacol.* 2017;811:66-73.

[3]. Shaw J, et al. The small-molecule TNF- α inhibitor, UTL-5g, delays deaths and increases survival rates for mice treated with high doses of cisplatin. *Cancer Chemother Pharmacol.* 2013;72(3):703-707.

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