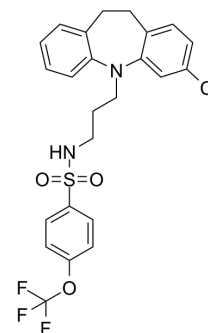


RTC-5

Cat. No.:	HY-123952		
CAS No.:	1423077-49-9		
Molecular Formula:	C ₂₄ H ₂₂ ClF ₃ N ₂ O ₃ S		
Molecular Weight:	510.96		
Target:	EGFR		
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK		
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 : 15 mg/mL (29.36 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	1.9571 mL	9.7855 mL	19.5710 mL
		5 mM	0.3914 mL	1.9571 mL	3.9142 mL
10 mM		0.1957 mL	0.9786 mL	1.9571 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.5 mg/mL (2.94 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.5 mg/mL (2.94 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	RTC-5 (TRC-382) is an optimized phenothiazine with anti-cancer potency. RTC-5 demonstrates efficacy against a xenograft model of an EGFR driven cancer, its effects is attributed to concomitant negative regulation of PI3K-AKT and RAS-ERK signaling ^[1] .
IC₅₀ & Target	IC ₅₀ : EGFR ^[1]
In Vitro	RTC-5 (0-40 μM; 48 hours) inhibits H1650 lung adenocarcinoma cell growth with an GI ₅₀ of 12.6 μM ^[1] . RTC-5 (20-40 μM; 24 hours) negatively regulates PI3K-AKT and RAS-ERK pathways by decreasing phospho-AKT and phospho-ERK levels expression ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay^[1]

Cell Line:	H1650 lung adenocarcinoma cells
Concentration:	0 μ M, 1 μ M, 10 μ M, 20 μ M, 30 μ M, 40 μ M
Incubation Time:	48 hours
Result:	Inhibited H1650 lung adenocarcinoma cell growth.

Western Blot Analysis^[1]

Cell Line:	H1650 lung adenocarcinoma cells
Concentration:	20 μ M, 40 μ M
Incubation Time:	24 hours
Result:	Decreased p-AKT, p-ERK expression.

REFERENCES

[1]. Kastrinsky DB, et al. Reengineered tricyclic anti-cancer agents. *Bioorg Med Chem*. 2015 Oct 1;23(19):6528-34.

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