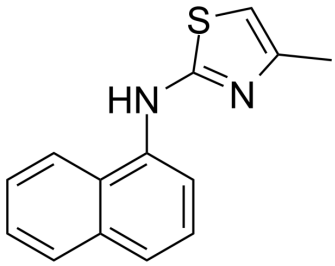
CCR4 antagonist 3

Cat. No.:	HY-147385
CAS No.:	1957-01-3
Molecular Formula:	$C_{14}H_{12}N_2S$
Molecular Weight:	240.32
Target:	CCR
Pathway:	GPCR/G Protein; Immunology/Inflammation
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 : 62.5 mg/mL (260.07 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.1611 mL	20.8056 mL	41.6112 mL
	5 mM	0.8322 mL	4.1611 mL	8.3222 mL
	10 mM	0.4161 mL	2.0806 mL	4.1611 mL

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

BIOLOGICAL ACTIVITY

Description

CCR4 antagonist 3 is a potent chemokine receptor 4 (CCR4) antagonist with an IC_{50} value of 1.7 μM for [^{125}I]TARC (thymus and activation regulated chemokine). CCR4 antagonist 3 inhibits binding of radiolabeled TARC and macrophage-derived chemokine (MDC) to CCR4 receptors on the surface of CEM cells. CCR4 antagonist 3 also inhibits the in vitro migration of CEM cells mediated by TARC (IC50 = 6.4 μM)[1].

IC_{50} & Target

[^{125}I]-TARC-CCR4
1.7 μM (IC_{50})

In Vivo

CCR4 antagonist 3 (compound 1) (0.5 mg/kg for IV; 2 mg/kg for PO; single dosage) exhibits a high clearance, short half-life and low oral bioavailability[1].

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

Animal Model:	Rats[1]

Dosage:	0.5 mg/kg for IV; 2 mg/kg for PO
Administration:	IV and PO; single dosage
Result:	Exhibited a high clearance of 4.2 L/h/kg and a short half-life of 0.4 h, and the oral bioavailability of 2%.

REFERENCES

[1]. Wang X, et al. Optimization of 2-aminothiazole derivatives as CCR4 antagonists. Bioorg Med Chem Lett. 2006 May 15;16(10):2800-3.

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