

# RBC8

Cat. No.:HY-12873CAS No.:361185-42-4Molecular Formula: $C_{25}H_{20}N_4O_3$ Molecular Weight:424.45Target:Ras

Pathway: GPCR/G Protein

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 : ≥ 40 mg/mL (94.24 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	2.3560 mL	11.7800 mL	23.5599 mL	
	5 mM	0.4712 mL	2.3560 mL	4.7120 mL	
	10 mM	0.2356 mL	1.1780 mL	2.3560 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: ≥ 2.5 mg/mL (5.89 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (5.89 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.89 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

#### Description

RBC8 is a novel small molecule inhibitor of Ral GTPase; has IC50 of 3.5  $\mu$ M in H2122 cell and 3.4  $\mu$ M in H358 cell.IC50 value:Target: Ral GTPase inhibitorRBC8 or BQU57 treatment showed no further inhibition of colony formation after Ral knockdown. RBC8 and BQU57 showed favorable properties that define good drug candidates. To test the effect of Ral inhibitors on xenograft tumor growth, nude mice were inoculated subcutaneously with H2122 human lung cancer cells and treated intraperitoneally with 50 mg/kg/d of RBC8 for 21 days (except weekends). RBC8 inhibited tumor growth to a similar extent as dual knockdown of RalA and RalB.

REFERENCES					
[1]. Yan C, et al. Discovery and ch	naracterization of small molec	ules that target the GTPase Ral	Nature. 2014 Nov 20;515(7527	):443-7.	
	Caution: Product has not	been fully validated for med	lical applications. For resea	arch use only.	
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