Proteins

## **Product** Data Sheet

# **TSHR antagonist S37b**

Cat. No.: HY-129995 CAS No.: 2143452-22-4 Molecular Formula:  $C_{25}H_{20}N_2O_3S_2$ Molecular Weight: 460.57

Target: **TSH Receptor** Pathway: GPCR/G Protein

Storage: Powder -20°C 3 years

2 years In solvent -80°C 6 months -20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (217.12 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1712 mL	10.8561 mL	21.7122 mL
	5 mM	0.4342 mL	2.1712 mL	4.3424 mL
	10 mM	0.2171 mL	1.0856 mL	2.1712 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 (5.43 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility: ≥ 2.5 mg/mL (5.43 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.43 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	TSHR antagonist S37b is the less effective enantiomer of TSHR antagonist S37a (HY-129995A). TSHR antagonist S37b shows only a minor effect for thyrotropin receptor (TSHR) inhibition. TSHR antagonist S37b can be used for the research of thyroid function <sup>[1]</sup> .
IC <sub>50</sub> & Target	$TSHR^{[1]}$

REFERENCES				
[1]. Marcinkowski P, et al. A Ne Jan;29(1):111-123.	ew Highly Thyrotropin Recept	tor-Selective Small-Molecule An	tagonist with Potential for the Trea	atment of Graves' Orbitopathy. Thyroid. 20
			nedical applications. For resea	
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