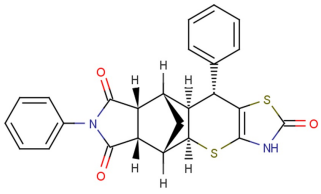
Data Sheet (Cat.No.T13217)

TargetMol
A DRUG SCREENING EXPERT

TSHR antagonist S37a

Chemical Properties



CAS No.:	2143452-20-2
Formula:	C25H20N2O3S2
Molecular Weight:	460.57
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	TSHR antagonist S37a is a selective antagonist of thyrotropin receptor (TSHR), with potential for the treatment of Graves' orbitopathy.
Targets(IC_{50})	TSHR: None
In vitro	In HEK293 cells, TSHR antagonist S37a is an inhibitor of TSHR (IC50s: 40 μM and ~20 μM for mTSHR and hTSHR). TSHR antagonist S37a also activation by monoclonal TSAb M22 (human), KSAb1 (murine), and the allosteric small-molecule agonist C2.
In vivo	In GO patients' sera, TSHR antagonist S37a inhibits cyclic adenosine monophosphate formation by oligoclonal TSAb, which are highly enriched.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.171 mL	10.856 mL	21.712 mL
5 mM	0.434 mL	2.171 mL	4.342 mL
10 mM	0.217 mL	1.086 mL	2.171 mL
50 mM	0.043 mL	0.217 mL	0.434 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Marcinkowski P, et al. A New Highly Thyrotropin Receptor-Selective Small-Molecule Antagonist with Potential for the Treatment of Graves' Orbitopathy. Thyroid. 2019 Jan;29(1):111-123.

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