Product Data Sheet



Cat. No.: HY-111534 CAS No.: 882366-16-7 Molecular Formula: $C_{14}H_{13}CIN_{2}O_{4}S$

Molecular Weight: 341

Target: G protein-coupled Bile Acid Receptor 1

Pathway: GPCR/G Protein

Powder -20°C Storage: 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 150 mg/mL (439.88 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9326 mL	14.6628 mL	29.3255 mL
	5 mM	0.5865 mL	2.9326 mL	5.8651 mL
	10 mM	0.2933 mL	1.4663 mL	2.9326 mL

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

In Vivo

- 1. Add each solvent one by one: corn oil Solubility: 5 mg/mL (14.66 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 2% DMSO >> 40% PEG300 >> 5% Tween-80 >> 53% saline Solubility: 3 mg/mL (8.80 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.33 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.33 mM); Clear solution

BIOLOGICAL ACTIVITY

Description SBI-115 is a TGR5 (GPCR19) antagonist. SBI-115 decreases hepatic cystogenesis with polycystic liver diseases via inhibiting TGR5^[1].

In Vitro SBI-115 (100-200 μM, 24 hours) inhibits proliferation triggered by pre-treatment of cystic cholangiocytes with Taurolithocholic acid (TLCA) in shRNA-transfected ADPKD cholangiocytes^[1].

MCE has not independe	ntly confirmed the accuracy of these methods. They are for reference only.	
Cell Proliferation Assay ^[1]		
Cell Line:	shRNA-transfected ADPKD cholangiocytes	
Concentration:	100, 200 μΜ	
Incubation Time:	24 hours	
Result:	Inhibited proliferation (by 32-48%) triggered by pre-treatment of cystic cholangiocytes with TLCA.	

CUSTOMER VALIDATION

- Nat Commun. 2022 Oct 14;13(1):6081.
- Acta Pharm Sin B. 21 July 2021.
- Pharmacol Res. 2022 Sep 21;106459.
- NPJ Biofilms Microbiomes. 2023 Feb 8;9(1):8.
- Phytomedicine. 2023 Jul 22;119:154982.

See more customer validations on $\underline{www.MedChemExpress.com}$

REFERENCES

[1]. Masyuk TV, et al. TGR5 contributes to hepatic cystogenesis in rodents with polycystic liver diseases through cyclic adenosine monophosphate/ $G\alpha$ s signaling. Hepatology. 2017 Oct; 66(4):1197-1218.

Caution: Product has not been fully validated for medical applications. For research use only.

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