

Product data sheet



MedKoo Cat#: 555569 Name: SBI-115 CAS#: 882366-16-7 Chemical Formula: C ₁₄ H ₁₃ ClN ₂ O ₄ S Exact Mass: 340.0285 Molecular Weight: 340.778	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

SBI-115 is a TGR5 (GPCR19) antagonist. SBI-115 decreases hepatic cystogenesis with polycystic liver diseases via inhibiting TGR5. TGR5 contributes to hepatic cystogenesis by increasing cAMP and enhancing cholangiocyte proliferation; our data suggest that a TGR5 antagonist alone or concurrently with somatostatin receptor agonists represents a potential therapeutic approach in polycystic liver disease.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	109.0	319.86

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.93 mL	14.67 mL	29.34 mL
5 mM	0.59 mL	2.93 mL	5.87 mL
10 mM	0.29 mL	1.47 mL	2.93 mL
50 mM	0.06 mL	0.29 mL	0.59 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- Lei Y, Li G, Li J, Gao S, Lei M, Gong G, Li C, Chen Y, Wang C, Wang X. Investigation of the potential role of TGR5 in pancreatic cancer by a comprehensive molecular experiments and the liquid chromatography mass spectrometry (LC-MS) based metabolomics. *Discov Oncol.* 2022 Jun 11;13(1):46. doi: 10.1007/s12672-022-00504-2. PMID: 35689739; PMCID: PMC9188013.
- Zhan Y, Wen Y, Zhang LL, Shen XL, Chen XH, Wu XH, Tang XG. Paeoniflorin Improved Constipation in the Loperamide-Induced Rat Model via TGR5/TRPA1 Signaling-Mediated 5-Hydroxytryptamine Secretion. *Evid Based Complement Alternat Med.* 2021 Dec 8;2021:6076293. doi: 10.1155/2021/6076293. PMID: 34925531; PMCID: PMC8674056.

In vivo study

- Xu J, Cao J, Tan B, Xie S. G protein-coupled bile acid receptor 1 reduced hepatic immune response and inhibited NFκB, PI3K/AKT, and PKC/P38 MAPK signaling pathway in hybrid grouper. *J Anim Sci.* 2023 Jan 3;101:skad307. doi: 10.1093/jas/skad307. PMID: 37715969; PMCID: PMC10576523.
- Masyuk TV, Masyuk AI, Lorenzo Pisarello M, Howard BN, Huang BQ, Lee PY, Fung X, Sergienko E, Ardecky RJ, Chung TDY, Pinkerton AB, LaRusso NF. TGR5 contributes to hepatic cystogenesis in rodents with polycystic liver diseases through cyclic

Product data sheet



adenosine monophosphate/G α s signaling. Hepatology. 2017 Oct;66(4):1197-1218. doi: 10.1002/hep.29284. Epub 2017 Aug 26. PMID: 28543567; PMCID: PMC5605412.

7. Bioactivity

Biological target:

SBI-115 is a TGR5 (GPCR19) antagonist.

In vitro activity

In this study, pancreatic cancer cells were treated with SBI-115. There was a significant reduction in cell proliferation capacity and induction of cell death following SBI-115 treatment. There were disturbances in mitochondrial morphology and alterations in metabolic pathways within the cancer cells under SBI-115 treatment.

Reference: Discov Oncol. 2022 Jun 11;13(1):46. <https://pubmed.ncbi.nlm.nih.gov/35689739/>

In vivo activity

SBI-115 has potential to alleviate cystogenesis. Animal models demonstrated that SBI-115 significantly reduced hepatic cystic areas when administered alone and even more markedly when combined with pasireotide.

Reference: Hepatology. 2017 Oct;66(4):1197-1218. <https://pubmed.ncbi.nlm.nih.gov/28543567/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.