



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

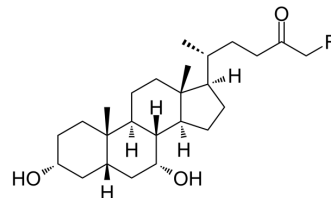
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

BSH-IN-1

Cat. No.:	HY-135659		
CAS No.:	2553217-91-5		
Molecular Formula:	C ₂₅ H ₄₁ FO ₃		
Molecular Weight:	408.59		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (61.19 mM; ultrasonic and warming and heat to 80°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4474 mL	12.2372 mL	24.4744 mL
	5 mM	0.4895 mL	2.4474 mL	4.8949 mL
	10 mM	0.2447 mL	1.2237 mL	2.4474 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BSH-IN-1 is a potent and covalent inhibitor of gut bacterial recombinant bile salt hydrolases (BSHs) with IC₅₀s of 108 nM and 427 nM for *B. longum* BSH (Gram positive) and *B. theta* BSH (Gram negative), respectively^[1].

In Vitro

BSH-IN-1 (Compound 7) also inhibits BSH activity in growing cultures of Gram-negative (*B. theta* VPI-5482, *Bacteroides fragilis* ATCC 25285, and *Bacteroides vulgatus* ATCC 8482) and Gram-positive (*Lactobacillus plantarum* WCFS1, *C. perfringens* ATCC 13124, and *Bifidobacterium adolescentis* L2-32) bacteria. BSH-IN-1 (Compound 7) also is a potent BSH inhibitor in growing bacterial cultures with IC₅₀s of 237 nM and 1070 nM for *B. adolescentis* (Gram positive) and *B. theta*

	(Gram negative), respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	BSH-IN-1 (Compound 7; 10 mg/kg; a single dose; gavage) inhibits BSH activity in C57BL/6 mice and can be gut-restricted ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
	Animal Model: C57BL/6 mice ^[1]
	Dosage: 10 mg/kg
	Administration: Single gavage
	Result: Inhibited gut bacterial BSH activity and modulated the bile acid pool in vivo while not significantly affected the gut bacterial community.

REFERENCES

[1]. Adhikari AA, et al. Development of a covalent inhibitor of gut bacterial bile salt hydrolases. Nat Chem Biol. 2020 Mar;16(3):318-326.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA