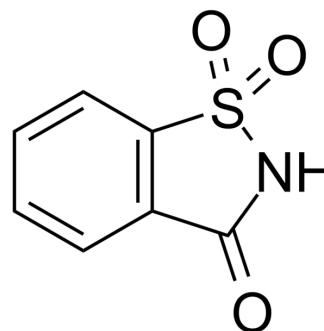


Saccharin

Cat. No.:	HY-Y0272		
CAS No.:	81-07-2		
Molecular Formula:	C ₇ H ₅ NO ₃ S		
Molecular Weight:	183.18		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (545.91 mM; Need ultrasonic)
 H₂O : 2.63 mg/mL (14.36 mM; ultrasonic and warming and heat to 60°C)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	5.4591 mL	27.2956 mL	54.5911 mL
	5 mM	1.0918 mL	5.4591 mL	10.9182 mL
	10 mM	0.5459 mL	2.7296 mL	5.4591 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 (13.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (13.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (13.65 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Saccharin is an orally active, non-caloric artificial sweeteners (NAS). Saccharin has bacteriostatic and microbiome-modulating properties^[1].

In Vitro

In vitro, saccharin (0.5, 2.5, 5 mM) inhibits bacterial growth in a species-dependent manner^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

In vivo, saccharin (oral; 5 mg/kg; twice a day) intake reduces fecal bacterial load and alters microbiome composition, while the intestinal barrier is not obviously affected in male C57BL/6Jrj wild type (wt) mice^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sünderhauf A, et al. Saccharin Supplementation Inhibits Bacterial Growth and Reduces Experimental Colitis in Mice. *Nutrients*. 2020 Apr 17;12(4). pii: E1122.

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