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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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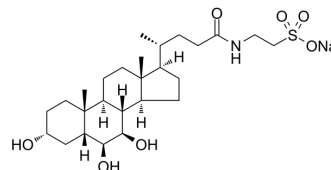
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Tauro-β-muricholic acid sodium

Cat. No.:	HY-135103
CAS No.:	145022-92-0
Molecular Formula:	C ₂₆ H ₄₄ NNaO ₇ S
Molecular Weight:	537.68
Target:	FXR
Pathway:	Metabolic Enzyme/Protease
Storage:	-20°C, stored under nitrogen, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (18.60 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.8598 mL	9.2992 mL	18.5984 mL
	5 mM	0.3720 mL	1.8598 mL	3.7197 mL
	10 mM	0.1860 mL	0.9299 mL	1.8598 mL

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

BIOLOGICAL ACTIVITY

Description

Tauro-β-muricholic Acid sodium (T-βMCA sodium), an endogenous metabolite, is a competitive and reversible farnesoid X receptor (FXR) antagonist, with an IC₅₀ of 40 μM^{[1][2][3]}.

IC₅₀ & Target

IC₅₀: 40 μM (FXR)^[1]

In Vitro

T-βMCA sodium inhibits FXR reporter activity in the CRC cell line HT29 (EC₅₀ ~10 μM)^[3].
T-βMCA sodium dose-dependently increases WNT signaling in HT29 and HCT116 cells^[3].
T-βMCA sodium induces proliferation and DNA damage in Lgr5⁺ cells^[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

T-βMCA sodium (400 mg/kg; i.g.; twice a week; for 6 weeks) can effectively recapitulate the ability of HFD to promote CRC progression^[3].
T-βMCA sodium treatment also significantly increases levels of serum cytokines, including IFN-γ, IL-6, and IL-17^[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	APCmin/+ mice ^[3]
Dosage:	400 mg/kg
Administration:	Oral gavage; twice a week; for 6 weeks
Result:	Markedly decreased intestinal integrity and accelerated tumor growth in the intestine and colon.

REFERENCES

- [1]. Sayin SI, et al. Gut microbiota regulates bile acid metabolism by reducing the levels of tauro-beta-muricholic acid, a naturally occurring FXR antagonist. *Cell Metab.* 2013 Feb 5;17(2):225-35.
- [2]. Wahlström A, et al. Induction of farnesoid X receptor signaling in germ-free mice colonized with a human microbiota. *J Lipid Res.* 2017 Feb;58(2):412-419.
- [3]. Fu T, et al. FXR Regulates Intestinal Cancer Stem Cell Proliferation. *Cell.* 2019 Feb 21;176(5):1098-1112.e18.

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

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