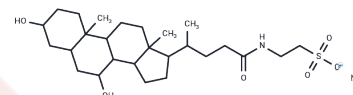


Tauroursodeoxycholate sodium

Chemical Properties

CAS No. :	35807-85-3
Formula:	C ₂₆ H ₄₄ NNaO ₆ S
Molecular Weight:	521.69
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Tauroursodeoxycholate sodium (TUDC) is an endoplasmic reticulum (ER) stress inhibitor, used for the treatment of gallstones and liver cirrhosis.
Targets(IC50)	Apoptosis,ERK,Caspase,Endogenous Metabolite
In vivo	In phalloidin-induced cholestasis rats, Tauroursodeoxycholate (360 µmol/kg, i.v.) significantly suppresses the decrease in bile flow and increases in serum alkaline phosphatase, leucine aminopeptidase and glutamic pyruvic transaminase activities, cholesterol, phospholipid and bile acid concentrations. [2]
Cell Research	Cell lines: Mz-ChA-1 cells. Concentrations: ~200 µM. Method: After trypsinization, Mz-ChA-1 cells are suspended in CCM at 5×10 ⁴ cells/mL, and 200 µL of the cell suspension is seeded into 96-well plates. After an initial incubation step of 4 h at 37°C in a 5% CO ₂ incubator, the cells are incubated at 37°C with TUDCA (0.2–200 µM). After incubation for 24–96 h, [³ H]thymidine is put into each well at 5.0 µCi/mL and incubated for additional 4 h. [³ H]thymidine incorporation is measured by a scintillation counter.
Animal Research	Animal Models: Phalloidin-induced cholestasis rats Formulation & . Dosages: Saline; 360 µMol/kg. Administration: intravenous injection

Solubility Information

Solubility	Ethanol: 10 mg/mL (19.17 mM), Sonication is recommended. DMSO: 257.5 mg/mL (493.59 mM), Sonication is recommended. H ₂ O: 92 mg/mL (176.35 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.83 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9168 mL	9.5842 mL	19.1685 mL
5 mM	0.3834 mL	1.9168 mL	3.8337 mL
10 mM	0.1917 mL	0.9584 mL	1.9168 mL
50 mM	0.0383 mL	0.1917 mL	0.3834 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Milkiewicz P, et al. *J Hepatol.* 2001, 34(2), 184-191.

Che J, Lv H, Yang J, et al. Iron overload induces apoptosis of osteoblast cells via eliciting ER stress-mediated mitochondrial dysfunction and p-eIF2 α /ATF4/CHOP pathway in vitro. *Cellular Signalling.* 2021 Aug;84:110024. doi: 10.1016/j.cellsig.2021.110024. Epub 2021 Apr 24.

Luo R, Li L, Liu X, et al. Mesenchymal stem cells alleviate palmitic acid induced endothelial to mesenchymal transition by suppressing endoplasmic reticulum stress. *American Journal of Physiology-Endocrinology and Metabolism.* 2020

Ishizaki K, et al. *Eur J Pharmacol.* 2001, 421(1), 55-60.

Alpini G, et al. *Am J Physiol Gastrointest Liver Physiol.* 2004, 286(6), G973-982.

Sommerfeld A, et al. *Cell Physiol Biochem.* 2015, 36(3), 866-883.

Luo R, Li L, Liu X, et al. Mesenchymal stem cells alleviate palmitic acid-induced endothelial-to-mesenchymal transition by suppressing endoplasmic reticulum stress[J]. *American Journal of Physiology-Endocrinology and Metabolism.* 2020, 319(6): E961-E980.

Luo R, Li L, Liu X, et al. Mesenchymal stem cells alleviate palmitic acid induced endothelial to mesenchymal transition by suppressing endoplasmic reticulum stress[J]. *American Journal of Physiology-Endocrinology and Metabolism.* 2020

Che J, Lv H, Yang J, et al. Iron overload induces apoptosis of osteoblast cells via eliciting ER stress-mediated mitochondrial dysfunction and p-eIF2 α /ATF4/CHOP pathway in vitro[J]. *Cellular Signalling.* 2021: 110024.

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