



TUDCA

Data Sheet

Catalog Number:	MC11042	Product Type:	Small Molecule
Bio-Activity:	ER stress inhibitor	CAS #:	14605-22-2
Research Categories:	Cellular stress, cell death, neuroscience, obesity, inflammation, neurodegeneration	Chemical Name:	3 α ,7 β -Dihydroxy-5 β -cholan-24-oic acid N-(2-sulfoethyl)amide
Solubility:	Soluble in DMSO (up to 30 mg/ml) or in Ethanol (up to 20 mg/ml with warming)	Molecular Formula:	C26H44NO6SNa
Purity:	> 98%	Molecular Weight:	521.7
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

A classic inhibitor of endoplasmic reticulum (ER) stress [1]. Reduces ER stress and adipose tissue inflammation in a mouse model of high fat diet-induced obesity [2]. Blocks ER stress-induced NLRP3 inflammasome activation and hepatocyte death [3]. Attenuates amyloid precursor protein processing and amyloid- β deposition in APP/PS1 mouse model [4].

References:

- 1) Xie et al. (2002), Effects of taurooursodeoxycholic acid on endoplasmic reticulum stress-induced caspase-12 activation; Hepatology, 36 592
- 2) Chen et al. (2016), chemical chaperones reduce ER stress and adipose tissue inflammation in high fat diet-induced mouse model of obesity; Sco. Rep., 6 27486
- 3) Lebeaupin et al. (2015), ER stress induces NLRP3 inflammasome activation and hepatocyte death; Cell Death Dis., 6 e1879
- 4) Nunes et al. (2012), TUDCA, a bile acid, attenuates amyloid precursor protein processing and amyloid- β deposition in APP/PS1 mice; Mol. Neurobiol. 45 440

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012