



<b>Catalog Number:</b>	MC11042	<b>Product Type:</b>	Small Molecule
<b>Bio-Activity:</b>	ER stress inhibitor	<b>CAS #:</b>	14605-22-2
<b>Research Categories:</b>	Cellular stress, cell death, neuroscience, obesity, inflammation, neurodegeneration	<b>Chemical Name:</b>	3 $\alpha$ ,7 $\beta$ -Dihydroxy-5 $\beta$ -cholan-24-oic acid N-(2-sulfoethyl)amide
<b>Solubility:</b>	Soluble in DMSO (up to 30 mg/ml) or in Ethanol (up to 20 mg/ml with warming)	<b>Molecular Formula:</b>	C26H44NO6SNa
<b>Purity:</b>	> 98%	<b>Molecular Weight:</b>	521.7
<b>Format:</b>	Powder	<b>Ship Temp:</b>	Ambient
<b>Storage:</b>	-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- $\beta$  deposition in APP/PS1 mouse model [4].

#### References:

- 1) Xie et al. (2002), Effects of tauroursodeoxycholic 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- $\beta$  deposition in APP/PS1 mice; Mol. Neurobiol. 45 440

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