# **PRODUCT** INFORMATION



**N-Stearoyl Taurine** 

Item No. 10005610

63155-80-6	
2-[(1-oxooctadecyl)amino]-	0
ethanesulfonic acid	
C <sub>20</sub> H <sub>41</sub> NO <sub>4</sub> S	
391.6	0
≥98%	
λ <sub>max</sub> : 202, 256 nm	
A solution in methanol	
-20°C	$\checkmark$ $\checkmark$ $\checkmark$ $\land$
≥2 years	
	2-[(1-oxooctadecyl)amino]- ethanesulfonic acid $C_{20}H_{41}NO_4S$ 391.6 ≥98% $\lambda_{max}$ : 202, 256 nm A solution in methanol -20°C

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

N-Stearoyl taurine is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of N-stearoyl taurine in these solvents is approximately 1.5 mg/ml.

## Description

Several different arachidonoyl amino acids, including N-arachidonoyl dopamine (NADA) and N-arachidonoyl serine (ARA-S), have been isolated and characterized from bovine brain.<sup>1</sup> During mass spectral lipidomic analysis of rat brain, a series of fatty acyl amides of a third amino acid, taurine, was discovered.<sup>2</sup> This novel class of compounds is present in kidney and activates members of the transient receptor potential (TRP) family of calcium channels.<sup>3</sup> N-Stearoyl taurine is a prominent amino-acyl endocannabinoid isolated from rat brain during lipidomics profiling.<sup>3</sup>

## References

- 1. Huang, S.M., Bisogno, T., Petros, T.J., et al. Identification of a new class of molecules, the arachidonyl amino acids, and characterization of one member that inhibits pain. J. Biol. Chem. 276(46), 42639-42644 (2001).
- 2. Cravatt, B. and Maxey, K.M. Personal communication. (2005).
- 3. Saghatelian, A., McKinney, M.K., Bandell, M., et al. A FAAH-regulated class of N-acyl taurines that activates TRP ion channels. Biochemistry 45(30), 9007-9015 (2006).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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