PRODUCT INFORMATION



N-acetyl Taurine

Item No. 35169

CAS Registry No.:	19213-70-8
Formal Name:	2-(acetylamino)-ethanesulfonic acid
Synonyms:	Acetyltaurine, NAcT O O
MF:	$C_4H_9NO_4S$
FW:	167.2 N
Purity:	≥95%
UV/Vis.:	λ_{max} : 212 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

N-acetyl Taurine is supplied as a solid. A stock solution may be made by dissolving the N-acetyl taurine in the solvent of choice, which should be purged with an inert gas. N-acetyl Taurine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of N-acetyl taurine in DMSO is approximately 15 mg/ml and approximately 10 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-acetyl taurine can be prepared by directly dissolving the solid in aqueous buffers. The solubility of N-acetyl taurine in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-acetyl Taurine is a derivative of the sulfur-containing amino acid taurine (Item No. 27031).^{1.2} It is formed endogenously from taurine and acetyl-CoA (Item Nos. 16160 | 21219). Urinary N-acetyl taurine levels are increased after alcohol consumption due to its formation from the acetate produced via alcohol catabolism.¹ N-acetyl Taurine levels are also transiently increased in the serum and urine after endurance exercise.²

References

- 1. Shi, X., Yao, D., and Chen, C. Identification of N-acetyltaurine as a novel metabolite of ethanol through metabolomics-guided biochemical analysis. J. Biol. Chem. 287(9), 6336-6349 (2012).
- 2. Marcinkiewicz, E. and Schaffer, S.W. Taurine 9. 1st edition, Springer Cham, Switzerland AG (2015).

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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