PRODUCT INFORMATION



N-acetyl-S-(3-hydroxypropyl)-L-Cysteine-d₆ (dicyclohexylamine salt) Item No. 26782

Formal Name:	N-acetyl-S-(3-hydroxypropyl-1,1,2,2,3,3-d ₆)-L- cysteine, dicyclohexylamine salt	
Synonyms:	3-HPMA-d ₆ ,	
	3-Hydroxypropyl Mercapturic Acid-d ₆	но с он
MF:	$C_8H_9D_6NO_4S \bullet C_{12}H_{23}N$	
FW:	408.6	
Chemical Purity:	≥98% (N-acetyl-S-(3-hydroxypropyl)-L-	Ĥ
	Cysteine)	
Deuterium		
Incorporation:	≥99% deuterated forms (d ₁ -d ₆); ≤1% d ₀	•
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-S-(3-hydroxypropyl)-L-Cysteine-d₆ (dicyclohexylamine salt) is intended for use as an internal standard for the quantification of N-acetyl-S-(3-hydroxypropyl)-L-cysteine by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

N-acetyl-S-(3-hydroxypropyl)-L-Cysteine-d₆ (dicyclohexylamine salt) is supplied as a solid. A stock solution may be made by dissolving the N-acetyl-S-(3-hydroxypropyl)-L-cysteine-d₆ (dicyclohexylamine salt) in the solvent of choice, which should be purged with an inert gas. N-acetyl-S-(3-hydroxypropyl)-L-Cysteine-d₄ (dicyclohexylamine salt) is slightly soluble in methanol and DMSO.

Description

N-acetyl-S-(3-hydroxypropyl)-L-Cysteine is a metabolite of acrolein, a respiratory irritant formed during combustion and found in tobacco smoke, that is produced via reduction of the aldehyde group of S-(3-oxopropyl)-N-acetyl cysteine.¹ N-acetyl-S-(3-hydroxypropyl)-L-Cysteine can be detected in urine as a biomarker of acrolein exposure.

Reference

1. Alwis, K.U., deCastro, B.R., Morrow, J.C., et al. Acrolein exposure in U.S. tobacco smokers and non-tobacco users: NHANES 2005-2006. Environ. Health Perspect. 123(12), 1302-1308 (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.

WARRANTY AND LIMITATION OF REMEDY

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