PRODUCT INFORMATION



N-acetyl-S-geranylgeranyl-L-Cysteine

Item No. 63340

CAS Registry No.:	139332-94-8	
Formal Name:	N-acetyl-S-(3,7,11,15-tetramethyl-	
	2E,6E,10E,14-hexadecatetraenyl)-	⊥ _s. ~ ~
	L-cysteine	
Synonym:	AGGC	
MF:	$C_{25}H_{41}NO_3S$	
FW:	435.7	
Purity:	≥95%	$\land \land \land \land \land$
Supplied as:	A solution in ethanol	$\gamma \sim \gamma \sim$
Storage:	-20°C	
Stability:	≥2 years	
Information represent	s the product specifications. Batch specific a	nalvtical results are provided on each certificate of analvsis.

Laboratory Procedures

N-acetyl-S-geranylgeranyl-L-Cysteine is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol 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-acetyl-Sgeranylgeranyl-L-cysteine in these solvents is approximately 33 mg/ml.

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. If an organic solvent-free solution of N-acetyl-S-geranylgeranyl-L-cysteine is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. N-acetyl-S-geranylgeranyl-L-cysteine is sparingly soluble in neutral aqueous buffers. For maximum aqueous solubility, N-acetyl-S-geranylgeranyl-L-cysteine can be directly disolved in 0.1 M Na₂CO₃ (11 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

Description

N-acetyl-S-geranylgeranyl-L-Cysteine is a synthetic substrate for the isoprenylated protein methyltransferase (also known as S-adenosylmethionine-dependent methyltransferase).^{1,2} Because it is able to serve as a substrate for the methyltransferase, it effectively functions as an inhibitor of methylation of endogenous isoprenylated proteins.

References

- 1. Volker, C., Lane, P., Kwee, C., et al. A single activity carboxyl methylates both farnesyl and geranylgeranyl cysteine residues. FEBS Lett. 295(1-3), 189-194 (1991).
- 2. Pérez-Sala, D., Gilbert, B.A., Tan, E.W., et al. Prenylated protein methyltransferases do not distinguish between farnesylated and geranylgeranylated substrates. Biochem. J. 284(3), 835-840 (1992).

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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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM