

PRODUCT INFORMATION

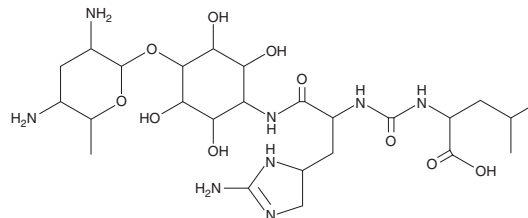


Minosaminomycin

Item No. 36406

CAS Registry No.: 51746-09-9
Formal Name: 1-[[[(2S)-3-[[[(4R)-2-amino-4,5-dihydro-1H-imidazol-4-yl]-2-[[[(1S)-1-carboxy-3-methylbutyl]amino]carbonyl]amino]-1-oxopropyl]amino]-1-deoxy-4-O-(2,4-diamino-2,3,4,6-tetradeoxy- α -D-arabino-hexopyranosyl)-D-myo-inositol

Synonym: MSM
MF: C₂₅H₄₆N₈O₁₀
FW: 618.7
Purity: $\geq 90\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Bacterium/*Streptomyces* sp. MA514-A1



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

Laboratory Procedures

Minosaminomycin is supplied as a solid. A stock solution may be made by dissolving the minosaminomycin in the solvent of choice. Minosaminomycin is soluble in organic solvents such as methanol and DMSO, which should be purged with an inert gas. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Minosaminomycin is an antibiotic that has been found in *Streptomyces*.¹ It is active against *M. smegmatis* and *M. phlei* (MICs = 1.56 and 6.25 $\mu\text{g/ml}$, respectively). Minosaminomycin (1 μM) inhibits the binding of formyl-Met-tRNA (fMet-tRNA) to ribosomes in the presence of the AUG trinucleotide by 96% in a cell-free assay and inhibits *Mycobacterium* protein synthesis when used at a concentration of 100 μM .²

References

1. Hamada, M., Kondo, S., Yokoyama, T., *et al.* Letter: Minosaminomycin, a new antibiotic containing myo-inosamine. *J. Antibiot. (Tokyo)* **27**(1), 81-83 (1974).
2. Suzukake, K. and Hori, M. Biochemical study of minosaminomycin in relation to the kasugamycin group antibiotics. *J. Antibiot. (Tokyo)* **30**(2), 132-140 (1977).

WARNING

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

SAFETY 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

CAYMAN CHEMICAL

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