

Product Information

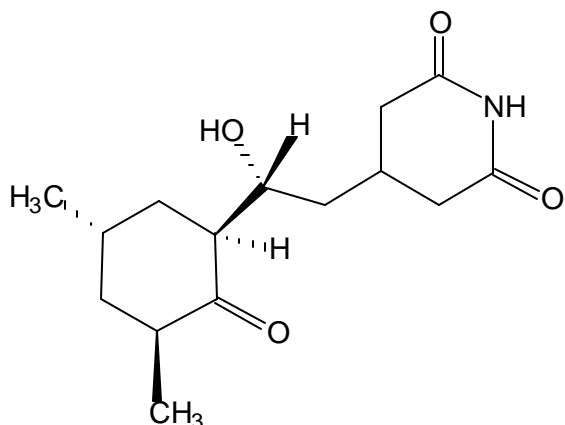
CYCLOHEXIMIDE READY MADE

Product Number **C 4859**

Storage Temperature 2-8 °C

CAS# 66-81-9

Synonyms: CHX, Actidione, Naramycin A, 3-[2-(3,5-Dimethyl-2-oxocyclohexyl)-hydroxyethyl]glutarimide



Product Description

Molecular Formula: C₁₅H₂₃NO₄

Molecular Weight: 281.4

Cycloheximide (CHX) is an antibiotic produced by *Streptomyces griseus*¹. Its main biological activity is translation inhibition in eukaryotes² resulting in the inhibition of protein synthesis leading to cell growth arrest and cell death. Since it inhibits eukaryotic but not prokaryotic protein synthesis, it is active against many yeasts and fungi, but tolerated by most bacteria.

CHX is widely used for the selection of CHX-resistant yeast and fungi strains,³ the controlled inhibition of protein synthesis for detection of short-lived proteins,⁴ the super-induction of protein expression,^{5,6} apoptosis induction,⁷ and facilitation of apoptosis induction by death receptors.⁸

Cycloheximide Ready Made was tested for cell growth arrest, selection of cycloheximide-resistant yeast, apoptosis induction and facilitation of FasL induced apoptosis.

Reagent

Cycloheximide Ready Made is a 100mg/ml cycloheximide solution in DMSO, 0.2µm-filtered.

Precautions and Disclaimer

Cycloheximide Ready Made is for laboratory use only; not for drug, household, or other uses.

Storage/Stability

Store Cycloheximide Ready Made well-sealed at 2-8 °C.

References

1. Kominek LA, Antimicrobial Agents and Chemotherapy, 7, 856-860 (1975).
2. Oxford Dictionary of Biochemistry and Molecular Biology, Smith AD, Datta SP, Howard Smith G Campbell PN, Bentley R and McKenzie HA (eds), Oxford University Press, 1997.
3. Manual of Clinical Microbiology, 4th edition, Lennette EH, Balows A, Hausler WJ, Shadomy HJ (eds), Washington DC, ASM, pp 500-584, (1985).
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5. Mizel SB and Mizel D, J. Immunology, 126, 834-837, (1981).
6. Ma Q et al., J. Biol. Chem., 275, 12676-12683 (2000).
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PY 8/01

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