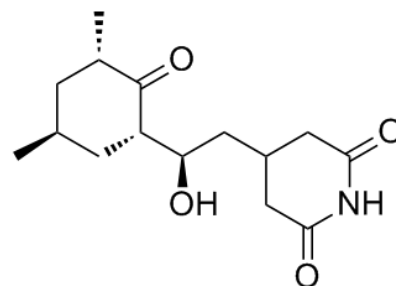


**Product Name** : Cycloheximide  
**Cat. No.** : PC-42973  
**CAS No.** : 66-81-9  
**Molecular Formula** : C<sub>15</sub>H<sub>23</sub>NO<sub>4</sub>  
**Molecular Weight** : 281.3474  
**Target** : DNA/RNA Synthesis  
**Solubility** :



## Biological Activity

Cycloheximide (Naramycin A, Actidione) is a widely-used **protein synthesis** inhibitor that inhibits protein biosynthesis in eukaryotic organisms with IC<sub>50</sub> of 532.5 nM and 2880 nM for protein synthesis and RNA synthesis in vivo, respectively. Cycloheximide blocks the elongation phase of eukaryotic translation, binds the ribosome and inhibits eEF2-mediated translocation.

Cycloheximide impairs memory more as footshock intensity increases, enhances memory in an inverted-U dose-response manner at low dose.

Cycloheximide also sensitizes COLO 205 cells to TNF- $\alpha$ -induced programmed cell death.

## References

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Neeman M, et al. Proc Natl Acad Sci U S A. 1989 Jul;86(14):5585-9.

Pajak B, et al. J Physiol Pharmacol. 2005 Jun;56 Suppl 3:101-18.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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