

## **Data Sheet**

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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 IC50 of 532.5 nM and 2880 nM for protein synthesis and RNA synthesis in vivo, respectively; block the elongation phase of eukaryotic translation, binds the ribosome and inhibits eEF2-mediated translocation; impairs memory more as footshock intensity increases, enhances memory in an inverted-U dose-response manner at low dose; also sensitizes COLO 205 cells to TNF-alpha-induced programmed cell death.

## References

Schneider-Poetsch T, et al. Nat Chem Biol. 2010 Mar;6(3):209-217.

Gold PE, et al. Behav Brain Res. 2012 Aug 1;233(2):293-7.

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!

E-mail: tech@probechem.com