

## Heparin

## Chemical Properties

CAS No. : 9005-49-6

Formula:

Molecular Weight:

Storage: Keep away from moisture, Store at low temperature,  
Keep away from direct sunlight  
Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
Actual storage temperature shall be subject to the COA.

## Biological Description

Description	Heparin (Adomiparin) is a mucopolysaccharide sulfate often used as an anticoagulant in clinical medicine. Heparin has shown partial anti-inflammatory activity in in vivo experiments.
Targets(IC50)	Endogenous Metabolite, Antibacterial, Autophagy, Thrombin
In vitro	Heparin, when administered for 6 days, demonstrates a reduction in the cytopathicity of HIV towards MT-4 cells, with an IC50 of 7.5 µg/mL[2]. In SGHPL-4 cell line, Heparin at a concentration of 0.5 U/mL for 48 hours inhibits the hepatocyte growth factor (HGF)-induced trophoblast invasion[3].

## Solubility Information

Solubility	DMSO: < 1 mg/mL (insoluble or slightly soluble) H2O: 100 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Reference

- Capila I, et al. Heparin-protein interactions. *Angew Chem Int Ed Engl.* 2002 Feb 1;41(3):391-412.
- Yang X, Liu L, Hao Y, et al. A Bioluminescent Biosensor for Quantifying the Interaction of SARS-CoV-2 and Its Receptor ACE2 in Cells and In Vitro. *Viruses.* 2021, 13(6): 1055.
- Liu Y Q, Liang C Q, Chen Z W, et al. 14-3-3ζ Participates in the Phase Separation of Phosphorylated and Glycated Tau and Modulates the Physiological and Pathological Functions of Tau. *ACS Chemical Neuroscience.* 2023
- Ganapathy R, et al. Effect of heparin and fractionated heparin on trophoblast invasion. *Hum Reprod.* 2007 Sep;22(9):2523-7.
- Ito M, et al. Inhibitory effect of dextran sulfate and heparin on the replication of human immunodeficiency virus (HIV) in vitro. *Antiviral Res.* 1987 Jul;7(6):361-7.
- Casu B, Naggi A, Torri G. Re-visiting the structure of heparin. *Carbohydr Res.* 2015 Feb 11;403:60-8. doi: 10.1016/j.carres.2014.06.023. Epub 2014 Jul 3. Review. PubMed PMID: 25088334.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481