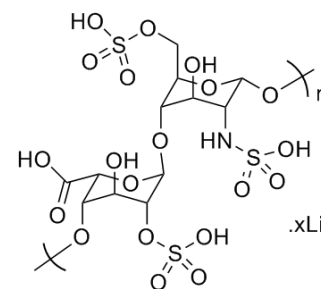


## Heparin Lithium salt

Cat. No.:	HY-17567B
CAS No.:	9045-22-1
Molecular Formula:	(C <sub>14</sub> H <sub>25</sub> NO <sub>20</sub> S <sub>3</sub> ) <sub>n</sub> .xLi
Target:	Autophagy
Pathway:	Autophagy
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro H<sub>2</sub>O : 125 mg/mL (Need ultrasonic)

### BIOLOGICAL ACTIVITY

Description	Heparin Lithium salt is an anticoagulant which binds reversibly to <b>antithrombin III (ATIII)</b> (50-400 U/Kg).
IC <sub>50</sub> & Target	Antithrombin III <sup>[1]</sup>
In Vitro	Heparin is a potent anticoagulant drug based on its ability to accelerate the rate at which antithrombin inhibits serine proteases in the blood coagulation cascade. Heparin interacts most tightly with peptides containing a complementary binding site of high positive charge density. Heparin resembles DNA as both are highly charged linear polymers that behave as polyelectrolytes. Heparin is believed to function as an anticoagulant primarily through its interaction with AT III by enhancing AT-III-mediated inhibition of blood coagulation factors, including thrombin and factor Xa. Heparin binds to AT III and thrombin in a ternary complex, increasing the bimolecular rate constant for the inhibition of thrombin by a factor of 2000. Heparin is principally located in the granules of tissue mast cells that are closely associated with the immune response. Heparin makes numerous contacts with both FGF-2 and FGFR-1 stabilizing FGF-FGFR binding. Heparin also makes contacts with the FGFR-1 of the adjacent FGF-FGFR complex, thus seeming to promote FGFR dimerization <sup>[1]</sup> .

### CUSTOMER VALIDATION

- ACS Nano. 2018 Feb 27;12(2):1321-1338.
- Biomaterials. 2018 Aug;175:93-109.
- ACS Appl Mater Interfaces. 2018 Aug 8;10(31):26128-26141.
- Cancer Res. 2019 Jul 15. pii: canres.1084.2019.
- FASEB J. 2019 Jul;33(7):7970-7984.

---

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

---

[1]. Capila I, et al. Heparin-protein interactions. Angew Chem Int Ed Engl. 2002 Feb 1;41(3):391-412.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA