



Heparin (0.2%)
(HEP)
Catalog #0863

Product Description

Heparin is a 10-12 kDa polysaccharide produced in mast cells. Heparin inhibits blood coagulation through binding and activation of anti-thrombin [1] and acts as a cofactor to basic Fibroblast Growth Factor-2 (bFGF) [2, 3, 4].

The effect of heparin on cell growth and morphology *in vitro* is cell-type dependent and may promote or inhibit cell proliferation. Culture media may be supplemented with heparin solution (HEP) at 1:1000-1:100 (0.36 – 3.6 U/mL). The optimal concentration should be determined for individual cell types and culture conditions.

Concentration

2 mg/mL heparin sodium salt (from porcine intestinal mucosa) in Dulbecco's Phosphate-Buffered Saline, sterile-filtered. Potency: > 180 Units per milligram*.

*Units are USP (United States Pharmacopeia units) and indicate heparin potency by weight. Units are not evaluated by ScienCell but are provided by supplier.

Product Use

HEP is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.

Storage

Store at 4°C.

Shipping

Gel ice.

References

- [1] Bjork I and Lindahl U. (1982) "Mechanism of the anticoagulant action of heparin". *Mol Cell Biochem*, 48(3):161-82.
- [2] Rapraeger A, Krufka A and Olwin B. (1991) "Requirement of heparin sulfate for bFGF-mediated fibroblast growth and myoblast differentiation". *Science*. 252(5013):1705-8.
- [3] Roghani M, Mansukhani A, et al. (1994) "Heparin increases the affinity of basic fibroblast growth factor for its receptor but is not required for binding". *J Biol Chem*. 269(6):3976-84.
- [4] Sasisekharan R, Ernst S and Venkataraman G. (1997) "On the regulation of fibroblast growth factor activity by heparin-like glycosaminoglycans". *Angiogenesis*, 1(1):45-54.

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.