

## Product Information

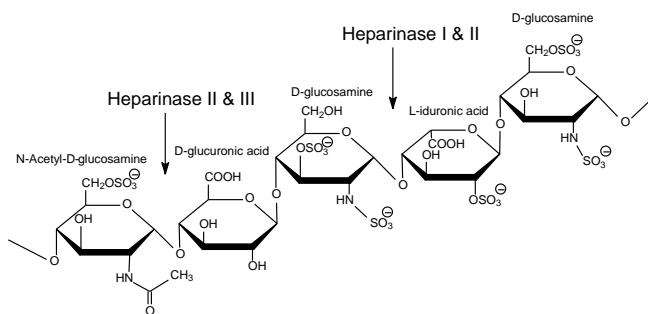
### Heparinase I and III Blend from *Flavobacterium heparinum*

Catalog Number **H3917**  
Storage Temperature  $-20\text{ }^{\circ}\text{C}$

#### Product Description

Heparinase is an enzyme used for degradation of various heparin substrates. The three forms of heparinase (I, II, and III) have varying substrate specificities.<sup>1-3</sup> This product is a blend of Heparinase I and Heparinase III:

- Heparinase I cleaves heparin and heparan sulfate (relative activity about 3:1) at the linkages between hexosamines and O-sulfated iduronic acids, yielding mainly disaccharides.
- Heparinase III cleaves at the 1→4 linkages between hexosamine and glucuronic acid residues in heparan sulfate, yielding mainly disaccharides. The enzyme is not active towards heparin or low molecular weight heparins.



The definition of an International Unit (IU) of heparinase is as follows: One IU will form 1  $\mu\text{mole}$  of unsaturated uronic acid per minute. Sigma units are defined as the amount of enzyme that will form 0.1  $\mu\text{mole}$  of unsaturated uronic acid per hour. Based on this information, one IU is equal to 600 Sigma units, despite the slight difference in assay temperatures.

This product is sold on the basis of Heparinase I units.

This product has been used in various studies and systems, including:

- *Vibrio fischeri* and *Salpingoeca rosetta*<sup>4</sup>
- Cultured cells<sup>5-7</sup>
- Cell culture media<sup>8</sup>
- Mouse retinae<sup>9</sup>
- Ovine vitreous humor<sup>10</sup>

#### Preparation Instructions

Similar to other heparinase products, one solvent system that can be used to reconstitute this product is 20 mM Trizma® HCl, pH 7.5, with 0.1 mg/mL BSA and 4 mM  $\text{CaCl}_2$ .

#### Storage/Stability

Store the product at  $-20\text{ }^{\circ}\text{C}$ .

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

#### References

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