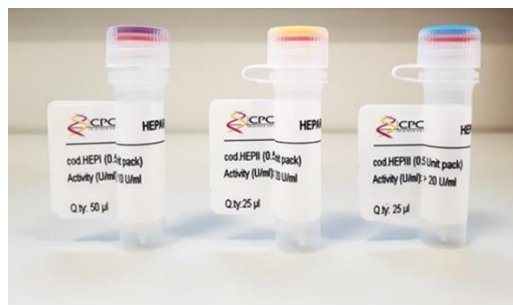


Heparinases I/II/III



THE PRODUCT

Heparinases (or heparin lyases) are a group of enzymes that catalyze the cut of heparin (and / or heparan sulfate) with the release of oligosaccharides (mainly disaccharides) containing unsaturated uronic acid. Heparinases, thanks to their mechanism of action, are widely used in the field of pharmacology for the production of Low Molecular Weight Heparins (LMWH).

FORMULATION AND PACK SIZE

Heparinase I, Heparinase II and Heparinase III from *Flavobacterium heparinum* (ATCC 13125) are produced recombinant and are available in liquid formulations with glycerol; each enzymatic solution is 0.22 μ m sterile filtered and dispensed in sterile vials; find below the different pack size available for each enzyme.

HEPARINASE I

- cod: Hep I-10: 10 U/vial, 1 vial/cf
- cod: Hep I-2: 2 U/vial, 1 vial/cf
- cod: Hep I-20: 20 U/vial, 1 vial/cf
- cod: Hep I-5: 5 U/vial, 1 vial/cf
- cod: Hep I-50: 50 U/vial, 1 vial/cf

HEPARINASE II

- cod: Hep II-0,1: 0,1 U/vial, 1 vial/cf
- cod: Hep II-0,25: 0,25 U/vial, 1 vial/cf
- cod: Hep II-0,5: 0,5 U/vial, 1 vial/cf
- cod: Hep II-1: 1 U/vial, 1 vial/cf
- cod: Hep II-10: 10 U/vial, 1 vial/cf
- cod: Hep II-2: 2 U/vial, 1 vial/cf
- cod: Hep II-5: 5 U/vial, 1 vial/cf

1 IU of Heparinase I is defined as the amount of enzyme required to form 1 μ mole of unsaturated uronic acid per minute at 25°C and pH 7.0 using heparin sodium as substrate.

1 IU of Heparinase II is defined as the amount of enzyme required to form 1 μ mole of unsaturated uronic acid per minute at 25° C and pH 7.0 using heparin as substrate.

HEPARINASE III

- cod: Hep III-0,5: 0,5 U/vial, 1 vial/cf
- cod: Hep III-0,5: 0,5 U/vial, 1 vial/cf
- cod: Hep III-1: 1 U/vial, 1 vial/cf
- cod: Hep III-10: 10 U/vial, 1 vial/cf
- cod: Hep III-2: 2 U/vial, 1 vial/cf
- cod: Hep III-5: 5 U/vial, 1 vial/cf

1 IU of Heparinase III is defined as the amount of enzyme required to form 1 μ mole of unsaturated uronic acid per minute at 25° C and pH 7.0 using heparan sulphate as substrate.

APPLICATION

Heparinases find their applications in the pharmacological field for:

- USP Chemical Tests λ (207)1,6-Anhydro Derivative for Enoxaparin Sodium and for depolymerization of heparin, LMWH heparin and heparan sulphate;
- for the neutralization of heparin in blood and plasma samples before analysis;
- for the similar in vitro neutralization of low molecular weight heparins;
- as integral part of in vitro diagnostic tests for the neutralization of heparin (blood clotting tests, platelet tests);
- for the preparation of low molecular weight heparins from unfractionated heparin;
- as a research reagent (glycosaminoglycan degradation);
- for the preparation of disaccharides of heparin and the preparation of oligosaccharide libraries.

STABILITY OF REAGENTS

Heparinase I has a stability of 12 months from manufacturing date; Heparinase II has a stability of 24 months from manufacturing date; Heparinase III has a stability of 36 months from manufacturing date. The enzymes should be stored at -15/-80°C.



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