

## **PRODUCT DATA SHEET**

Product Name	Heparinase II
Synonyms	Heparin Lyase II, Heparitinase II
Source	Flavobacterium heparinum (ATCC 13125) (recombinant)
Product Code	Hep II
EC Number	Not assigned
CAS Number	149371-12-0
Catalyzed Reaction	Heparinase II cleaves heparan sulphate and heparin, the heparan sulphate activity being about twice as high as the heparin activity. Generally, the enzyme cleaves sulphated polysaccharides containing (1-4) linkages between uronic (iduronic and glucuronic) acid and hexosamine residues. The elimination reaction yields oligosaccharides (mostly disaccharides) containing unsaturated uronic acids, detectable by UV spectroscopy (232 nm).
Substrates	Heparin; sulphated domains of Heparan Sulphate.
Properties	<ul> <li>Molecular weight: 85 KDa</li> <li>Optimal testing temperature: 25 °C</li> </ul>
Storage	Optimal storage temperature: - 15 °C to -80°C. Avoid repeated freeze- thawing.
Purity	≥ 97 % by SDS PAGE.
Description	The enzyme is formulated with glycerol, 0.22 µm sterile-filtered and dispensed into sterile vials. The enzyme solution is supplied world-wide as frozen solution shipped on dry ice. Expiration is established at 3 years after manufacturing.
Unit Definition	One Unit of Heparinase II is defined as the amount of enzyme required to form one µmole of unsaturated uronic acid per minute at 25° C and pH 7.0 using heparin as substrate.
Application	<ul> <li>Use for USP Chemical Tests /(207)1,6-Anhydro Derivative for Enoxaparin Sodium and for depolymerization of heparin, LMW heparin and heparan sulphate.</li> <li>As research reagent (glycosaminoglycan degradation).</li> <li>For the preparation of di- and oligo-saccharides of heparin and heparan sulfate and the preparation of oligosaccharide libraries.</li> </ul>
Safety Information	We are not aware of any toxicity associated with this product. In common with good laboratory practice the material should only be handled by qualified personnel trained in laboratory procedures and familiar with potential hazards. For in vitro research use only. Not for human or drug use.



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## References