

## Product Information

### Heparinase II from *Flavobacterium heparinum*

Catalog Number **H6512**

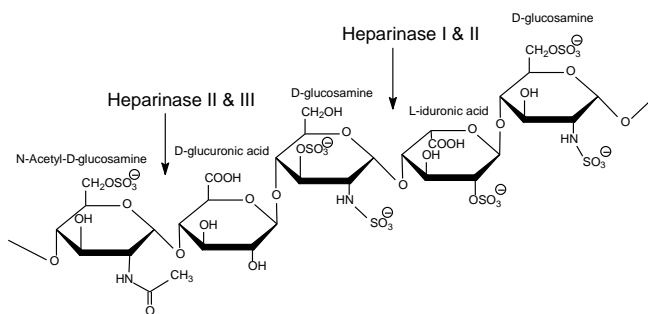
Storage Temperature  $-20^{\circ}\text{C}$

CAS Number: 149371-12-0

Synonyms: Heparin lyase II, Heparinase II

#### Product Description

Heparinase II is one of three key heparin-degrading enzymes of *Flavobacterium heparinum* (also known as *Pedobacter heparinus*<sup>1</sup>). Heparinase II cleaves heparan sulfate, and to a lesser extent heparin (relative activity about 2:1), at the 1 $\rightarrow$ 4 linkages between hexosamines and uronic acid residues (both glucuronic and iduronic), yielding mainly disaccharides. Heparinase II has the broadest substrate specificity of the three heparinases,<sup>2,3</sup> and the substrate specificities of the different heparinases have been compared.<sup>4</sup>



Heparinase II has a molecular mass of ~84 kDa and a pI ~9.<sup>2</sup> The crystal structure of heparinase II has been reported.<sup>1</sup>

Heparin interferes with DNA transcription in PCR and in reverse transcription of RNA. Heparinase II has been used to remove heparin for downstream analysis of genomic DNA.<sup>5</sup>

One International Unit (IU) of heparinase is equivalent to ~600 Sigma units of heparinase.

#### Precautions and Disclaimer

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

#### Storage/Stability

Heparinase II is unstable at elevated temperatures and can be heat-inactivated by boiling. Stock solutions of heparinase II may be stored at  $-60^{\circ}\text{C}$ , although we have not performed solution stability studies.

#### References

1. Shaya, D. *et al.*, *J. Biol. Chem.*, **281**(22), 15525-15535 (2006).
2. Shriver, Z. *et al.*, *J. Biol. Chem.*, **273**(36), 22904-22912 (1998).
3. Moffat, C.F. *et al.*, *Eur. J. Biochem.*, **197**(2), 449-459 (1991).
4. Linhardt, R.J. *et al.*, *Biochemistry*, **29**(10), 2611-2617 (1990).
5. Koller, C.A., and Kohli, V., *Nucleic Acids Res.*, **21**(12), 2952 (1993).

GCV,FEB,AJH,MAM 11/16-1