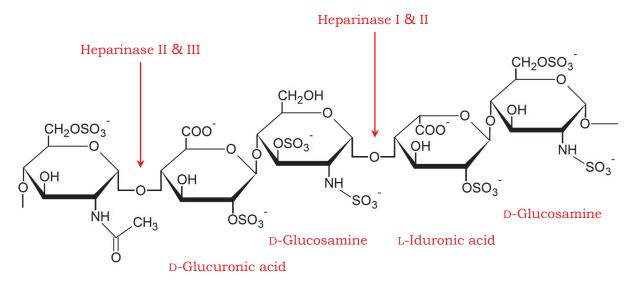
# Heparinases

# from Flavobacterium heparinum

Asnail provides high-quality native heparinases for various applications such as heparin analysis, coagulation testing and glycobiology studies.

## Specificity



N-Acetyl-D-glucosamine

Heparinases can clave glycosidic bonds of heparin and/or heparan sulfate by a  $\beta$ -elimination mechanism, generating unsaturated products (mostly disaccharides) with a double bond between C4 and C5 of the uronate residue.

The resulting unsaturated products can be measured at 232 nm wavelength.

Enzyme	Substrates
Heparinase I	Heparin and heparan sulfate (ratio approx. 3:1)
Heparinase II	Heparin and heparan sulfate
Heparinase III	Heparan sulfate

#### **Features**

- ⇒ Natural enzymes, isolated from Flavobacterium heparinum
- ⇒ High purities, without BSA or other protein impurities
- ⇒ Superb stabilities, especially for heparinase II

### Specifications

	Heparinase I	Heparinase II	Heparinase III
CAS Number	9025-39-2	149371-12-0	37290-86-1
EC Number	4.2.2.7	-	4.2.2.8
Molecular Weight	42.8 kDa	84.1 kDa	70.8 kDa
Purity (HPLC)	> 99%	> 99%	> 99%
Specific Activity	> 400 IU/mg (heparin)	> 15 IU/mg (heparin); > 18 IU/mg (HS)	> 200 IU/mg (HS)
Concentration	10 IU/mL	4 IU/mL	5 IU/mL
Storage Temperature	- 20 °C	- 20 °C	- 20 °C

Website: www.asnailtech.com

**NOTE:** 1 IU = 600 Sigma units where IU stands for international unit.

## **Applications**

- ⇒ Determining 1,6-anhydro derivatives in enoxaparin sodium
- ⇒ Degrading of heparin before qPCR experiments for determining the origin of heparin
- ⇒ Processing blood samples or other tissues in order to neutralize heparin in routine coagulation testing and thromboelastography (TEG)

#### Order information

Catalog #	Description	Sizes
AS00-2519	Heparinase I, from Flavobacterium Heparinum	0.1 IU, 0.2 IU, 0.5 IU, 1.0 IU
AS00-6512	Heparinase II, from Flavobacterium Heparinum	0.1 IU, 0.2 IU, 0.5 IU, 1.0 IU
AS00-8891	Heparinase III, from Flavobacterium Heparinum	0.1 IU, 0.2 IU, 0.5 IU, 1.0 IU

**NOTE:** Heparinases must be stored at -20 °C or below. Use dry ice as coolant during transportation.