



### K5 Heparan Lyase

- Catalogue no:** HL01
- General Description:** Heparan K5 Lyase is a recombinant enzyme. Each aliquot contains 100 milli-international units and 100 micrograms total protein (92 ug BSA as carrier) lyophilised from solution in 50mM Tris, 50mM NaCl, and 0.1% Triton X100, pH 8.0. The enzyme is freeze-dried in 100ul aliquots from.
- Unit Definition:** The unit definition is the activity that releases 1 micromole of delta (4,5) hexuronate per minute at 37°C using an extinction coefficient of 5100 per cm per M at 232nm for the delta (4,5) hexuronate product.
- Catalysed Reaction:** The enzyme cleaves heparan sulfate in the non-sulfated regions of the polymer chain. K5 lyase leaves a short "stub" region on heparan sulphate proteoglycan core proteins that is recognised by the 3G10 antibody.
- Quantity:** 100 milliunits per vial
- Appearance:** white powder
- Origin:** E. coli, strain TOP10, a disabled K-12 strain
- Mol Wt:** 52.3 kDa on SDS-PAGE (single band) stable trimer (157KDa) in non-denaturing gels.
- Toxicity and Hazards:** 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 and safety procedures. These products are not intended for human consumption, drug use or any form of human experimentation.
- Applications:** Biological, biochemical and biophysical laboratory research
- Storage:** Although we have not done a complete stability study the enzyme is stable in solution at 4 °C - however we suggest that it is used within one month if kept at 4 °C. We do recommend that all products are stored for long term frozen at -15°C to -20°C upon receipt and that they are allowed to warm to room temperature before opening. If made up into solutions avoid repeated freeze-thawing. Stock solutions should be prepared in appropriate aliquots and stored frozen.
- Warranties:** Iduron warrants that its products shall conform to the description of such products as provided in Iduron's catalogue. This warranty is exclusive, and seller makes no other warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose. See 'terms and conditions' for further warranty information.
- References:** *Murphy et al., (2004) J. Biol. Chem. 279, 27239-27245*  
*Clarke et al, (2000) J Bacteriol. 182, 3716-3766*

## Product Data Sheet

