

Active Recombinant Mouse Idua protein, His-tagged

Cat. No. Idua-220M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Idua (Glu17-Ser634) fused with His tag at C-terminal was expressed in NS0.
Species	Mouse
Source	Mammalian Cells
ProteinLength	17-634 a.a.
Description	alpha -L-Iduronidase encoded by the IDUA gene is an important enzyme required for the lysosomal degradation of glycosaminoglycans (GAGS). It hydrolyzes the non-reducing terminal alpha -L-iduronic acid residues in GAGS including dermatan sulfate and heparan sulfate. Mature mouse IDUA shares 80% aa identity with human IDUA. Mutations in IDUA that result in enzymatic deficiency lead to the autosomal recessive disease mucopolysaccharidosis type I (MPS I). MPS I can be classified as three clinical subtypes; Hurler syndrome, Hurler-Scheie syndrome, and Scheie syndrome with decreasing severity, respectively. MPS I causes progressive cellular, tissue and organ damage, and several clinical studies using enzyme replacement therapy show positive results. Recently, the IDUA gene has been linked to osteoporosis.
Predicted N Terminal	Glu17
Form	Supplied as a 0.2 µm filtered solution in Sodium Acetate, NaCl and Glycerol.
Bio-activity	Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl alpha -

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	L-iduronide. The specific activity is >7,500 pmol/min/ug.
Molecular Mass	Predicted Molecular Mass: 70 kDa SDS-PAGE: 83-95 kDa, reducing conditions
Endotoxin	<0.1 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -20 to -70 centigrade as supplied. 3 months, -20 to -70 centigrade under sterile conditions after opening.

GENE INFORMATION

Gene Name	Idua iduronidase, alpha-L- [Mus musculus]
Official Symbol	Idua
Synonyms	IDUA; iduronidase, alpha-L-; alpha-L-iduronidase; 6030426D08;
Gene ID	15932
mRNA Refseq	NM_008325
Protein Refseq	NP_032351

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