

Recombinant Human IDUA therapeutic protein(Laronidase)

Cat. No. IDUA-P025H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human alpha-L-iduronidase, 628 residues (mature form), produced by recombinant DNA technology in a Chinese hamster ovary cell line. Laronidase is a glycoprotein with a molecular weight of approximately 83 kD. The predicted amino acid sequence of the recombinant form, as well as the nucleotide sequence that encodes it, are identical to a polymorphic form of human a-L-iduronidase. It contains 6 N-linked oligosaccharide modification sites.
Species	Human
Source	CHO
Description	This gene encodes an enzyme that hydrolyzes the terminal alpha-L-iduronic acid residues of two glycosaminoglycans, dermatan sulfate and heparan sulfate. This hydrolysis is required for the lysosomal degradation of these glycosaminoglycans. Mutations in this gene that result in enzymatic deficiency lead to the autosomal recessive disease mucopolysaccharidosis type I (MPS I). The expression product is the active ingredient of Aldurazyme.
Molecular Mass	69.9 kDa
AA Sequence	APHLVQVDAARALWPLRRFWRSTGFCPLPHSQADQYVLSWDQQLNLAYVGAVPH RGIKQVRTHWLLELVT TRGSTGRGLSYNFTHLDGYLDLLRENQLLPGFELMGASG HFTDFEDKQQVFEWKDLVSSLARRYIGRYGL AHVSKWNFETWNEPDHHDFFDNVS MTMQGFLNYYDACSEGLRAASPALRLGGPGDSFHTPPRSPLSWGLLRH CHDGTN

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FFTGEAGVRLDYISLHRKGARSSISILEQEKVVAQQIRQLFPKFADTPIYNDEADPLVG
 WSLPQP WRADVTYAAMVVKVIAQHQNLLANTTSAPFYALLSNDNAFLSYHPHPFA
 QRTLTA RFQVNNTRPPHVQLL RKPVLTA MGLLALLDEEQLWAEVSQAGTVLDSNHT
 VGVLASAHRPQGPADAWRAAVLIYASDDTRAH PNRSVAVTLRLRGVPPGPGPLVYV
 TRYLDNGLCSPDGEWRRLLGRP VFPTAEQFRMR AAEDPVAAA PRPLPA GGRLTLR
 PALRLPSLLLHVHVCARPEKPPGQVTRLRALPLTQGGQLVLVWSDEHVGSKCLWTYEI
 QFSQDGKA YTPVSRKPSTFNL FVFSPDTGAVSGSYRVRALDYWARPGPFSDPVPY
 LEVPVPRGPPSPGNP

Endotoxin < 1.0 EU per µg of the protein

Purity >95%

Storage Can be stored at +4 centigrade short term (1-2weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

Alias IDUA; MPS1; IDA; Laronidase

GENE INFORMATION

Gene Name IDUA iduronidase, alpha-L- [Homo sapiens]

Official Symbol IDUA

Synonyms IDUA; iduronidase, alpha-L-; alpha-L-iduronidase; MPS1; IDA;

Gene ID 3425

mRNA Refseq NM_000203

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Protein Refseq	NP_000194
MIM	252800
UniProt ID	P35475
Chromosome Location	4p16.3
Pathway	Dermatan sulfate degradation, organism-specific biosystem; Dermatan sulfate degradation, conserved biosystem; Glycosaminoglycan degradation, organism-specific biosystem; Glycosaminoglycan degradation, conserved biosystem; Heparan sulfate degradation, organism-specific biosystem; Heparan sulfate degradation, conserved biosystem; Lysosome, organism-specific biosystem;
Function	L-iduronidase activity; cation binding;

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