

Specifications:

Gene:	<i>hIDUA</i>
Accession:	NP_000194.2
Insert size:	1975bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

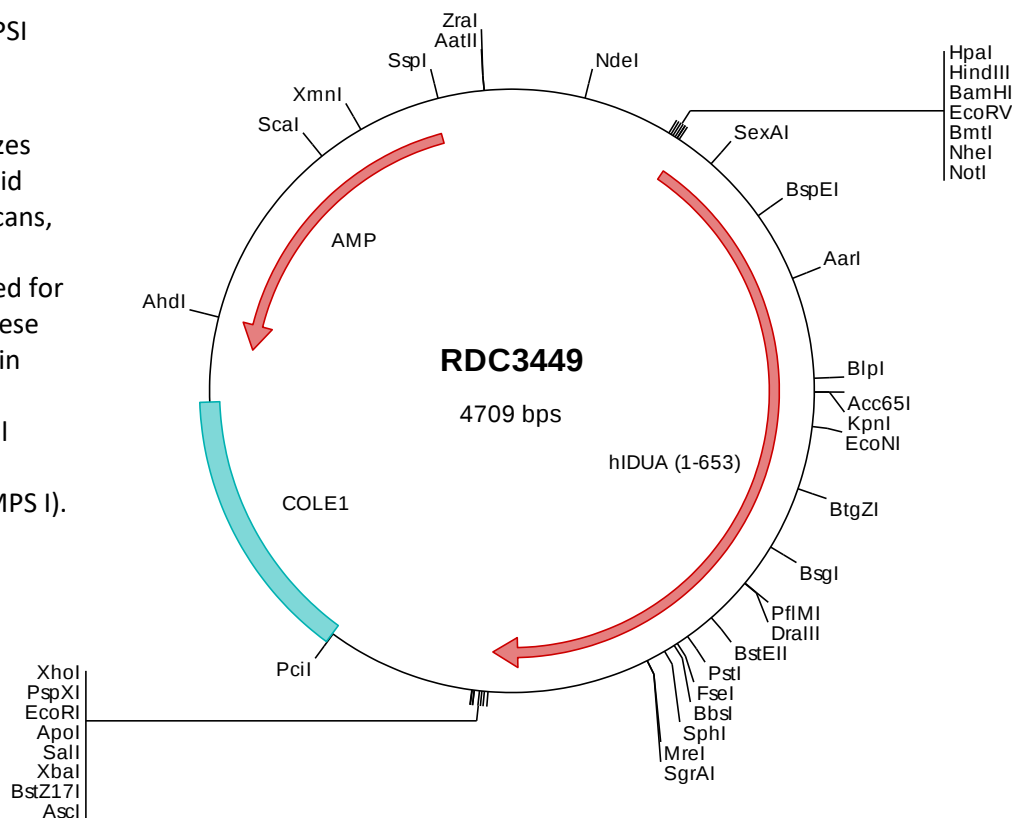
*h*IDUA cDNA Plasmid

IDUA alpha-L-iduronidase [*Homo sapiens* (human)]

Also known as: IDA; MPS1; MPSI

Summary:

IDUA is 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 IDUA that result in enzymatic deficiency lead to the autosomal recessive disease mucopolysaccharidosis type I (MPS I).



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC3449 Plasmid DNA Sequence

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1   tcgcgcgctt cggatgatgac ggtgaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcaggggcgc tcagcgggtg ttggcgggtg tcggggctgg ctttaactat cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctcgcc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaagg ggaatgtctg caaggcgatt aagttgggta acgccagggt tttcccgatc acgacgttgt aaaacgacgg ccagtgatatt
401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgcacc atgcgtcccc tgccgccccg cgccgcgctg ctggcgctcc tgccctcgct
501  cttgccgcg cccccggttg ccccgcgcga ggccccgcac ctggttcatg tggaacgcgc ccgcgcgctg tgcccccctg ggcgcttctg gaggagcaca
601  ggctttctgc cccccgctgc acacagccag gctgaccagt acgtctctag ctgggaccag cagctcaacc tcgcctatgt ggcgcccgct cctcaccgcg
701  gcatacaagca ggtcgcgacc caactggctgc tggaagctgt caccaccagg gggtccactg gacggggcct gagctacaac ttcaccacac tggaacggta
801  cttggaacctt ctcagggaga accagctcct cccagggttt gagctgatgg gcagcgcttc gggccaactc actgactttg aggacaagca gcaggtgttt
901  gagtggaagg acttggcttc cagcctggcc aggagataca tcggttagta cggactggcg catgtttcca agtggaaatt cgagacgtgg aatgagccag
1001 accacacaga ctttgacaac gtctccatga ccatgcaagg cttcttgaa tactacgatg cctgctcgga gggtctgcgc gcccgcagcc ccgcccctcg
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1801 aacgcagcg tcgcggtgac ctgcggctg cgcggggtgc cccccgcccc ggcgctggct taactcagc gctactgga caacgggctc gcagccccgc
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2501 ctgtgtgtaa attgttatcc gctcaccaat ccacacaaca tacgagcccg aagcataaag tgtaagcct ggggtgccta atgagttagc taactacat
2601 taattgcgtt gcgctcactc cccgttttcc agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg gtttgcgtat
2701 tgggcgctct tcgcttctct cgcctactga ctcgtctgcg tcggtctgtc ggctgcggcg agcggtatca gctcactcaa agccggtaat acggttatcc
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4601 atagggggtc cgcgacacatt tccccgaaaa gtgccacctg acgtctaaga aaccattatt atcatgacat taacctataa aaataggcgt atcacgagcg
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> RDC3449 Translated Insert Sequence

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101  gstgrglsyn fthldgyldl lrenqllpgf elmgasaghf tdfedkqvfv ewkdvlvssla rryigrygla hvskwnfetw nepdhhdhfdn vsmtmqggfln
201  yydacseglr aaspalrlgg pgdsfhtppr splswgllrh chdgtntfft eagvrlidyis lhrkgarssi sileqekvva qqirqlfpkf adtpiyndea
301  dplvgwslpq pwradvtyaa mvkviahqg nlllanttsa fpyallsndn aflsyhphpf aqrtlrtarfq vnntrpphvq llrkpvlrtam gllallddeeq
401  lwaevsqagt vldsnhtvgv lasahrpqgp adawraavli yasddtrahp nrsvavtlrl rgvpppgplv yvtryldngl cspdgewrrl grpfvftaeq
501  frmrmaaedp vaaaprplpa ggrltlrpal rlpslllvhv carpekkppg vtrlrplptl ggqlvlvwsd ehvgsklwt yeiqfsdqdgk aytpvskrps
601  tfnlvfvsfd tgavgsyrv raldywarpg pfedpvpyle vvpvpgppsp gnp

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