

Product datasheet for RC215294

Iduronate 2 sulfatase (IDS) (NM_006123) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Iduronate 2 sulfatase (IDS) (NM_006123) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Iduronate 2 sulfatase
Synonyms:	ID2S; MPS2; SIDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215294 representing NM_006123 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGCCACCCCGACCGGCCGAGGCCTTCTCTGGCTGGGTCTGGTTCTGAGCTCCGTCTGCGTCGCCC
TCGGATCCGAAACGCAGGCCAACTCGACCACAGATGCTCTGAACGTTCTTCTCATCATCGTGGATGACCT
GCGCCCCCTCCCTGGGCTGTTATGGGGATAAGCTGGTGAGGTCCCCAAATATTGACCAACTGGCATCCCAC
AGCCTCCTTCCAGAATGCCTTTCGCGCAGCAAGCAGTGTGCGCCCCGAGCCGCTTCTTCTCCTCACTG
GCAGGAGACCTGACACCACCCGCTGTACGACTTCAACTCCTACTGGAGGGTGCACGCTGGAACCTTCTC
CACCATCCCCAGTACTTCAAGGAGAATGGCTATGTGACCATGTGCGTGGGAAAAGTCTTTCACCCTGGG
ATATCTTCTAACCATACCGATGATTCTCCGTATAGCTGGTCTTTTCCACCTTATCATCCTTCTCTGAGA
AGTATGAAAACACTAAGACATGTGAGGGCCAGATGGAGAATCCATGCCAACCTGCTTTGCCCTGTGGA
TGTGCTGGATGTTCCCGAGGGCACCTTGCTGACAAACAGAGCACTGAGCAAGCCATACAGTTGTTGGAA
AAGATGAAAACGTCAGCCAGTCCCTTCTCCTGGCCGTTGGGTATCATAAGCCACACATCCCCTTCAGAT
ACCCCAAGGAATTCAGAAGTTGTATCCCTTGGAGAATCACCCTGGCCCCGATCCCAGGTCCCTGA
TGGCCTACCCCTGTGGCCTACAACCCCTGGATGGACATCAGGCAACGGGAAGACGTCCAAGCCTTAAC
ATCAGTGTGCCGTATGGTCCAATTCCTGTGGACTTTCAGCGGAAAATCCGCCAGAGCTACTTTGCCTCTG
TGTGATATTTGGATACACAGGTGCGCCGCTCTTGAGTGCTTTGGACGATCTTCAGCTGGCCAACAGCAC
CATCATTGCATTTACCTCGGATCATGGTTTCTCATGAGGACAAATACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC215294 representing NM_006123
 Red=Cloning site Green=Tags(s)

MPPPRTRGRLLWLGLVLSVVCVALGSETQANSTTDALNVLLIIVDDL RPSLGCYGDKLV RSPNIDQLASH
 SLLFQNAFAQQAVCAPSRVSFLTGRRPDTRL YDFNSYWRVHAGNFSTIPQYFKENGYVTMSVGKVFHFG
 ISSNHTDDSPYSWSFPPYHPSSEKYENTKTCRGPDGELHANLLCPVDVLDVPEGLPKDQSTEQAIQLLE
 KMKTSASPFFLAVGYHKPHIPFRYPKEFQKLYPLENITLAPDPEVPDGLPPVAYNPWMDIRQREDVQALN
 ISVYPGPIPVDVFRKIRQSYFASVSYLDTQVGRLLSALDDLQLANSTIIAFTSDHGFLMRTNT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1539_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006123

ORF Size: 1029 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_006123.5](#)

RefSeq Size: 1314 bp

RefSeq ORF: 1032 bp

Locus ID: 3423

UniProt ID: [P22304](#)

Cytogenetics: Xq28

Domains: Sulfatase

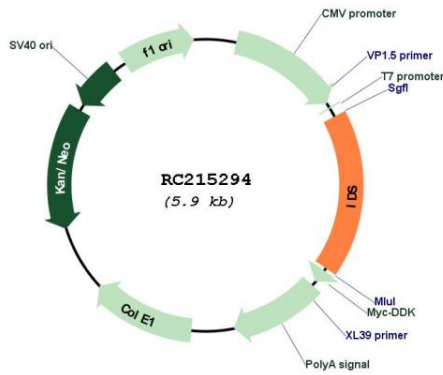
Protein Families: Druggable Genome

Protein Pathways: Glycosaminoglycan degradation, Lysosome, Metabolic pathways

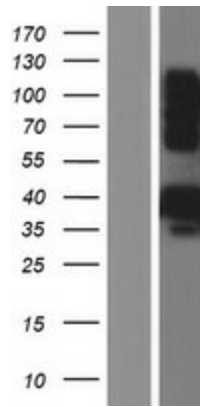
MW: 38.31 kDa

Gene Summary: This gene encodes a member of the sulfatase family of proteins. The encoded preproprotein is proteolytically processed to generate two polypeptide chains. This enzyme is involved in the lysosomal degradation of heparan sulfate and dermatan sulfate. Mutations in this gene are associated with the X-linked lysosomal storage disease mucopolysaccharidosis type II, also known as Hunter syndrome. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC215294



Western blot validation of overexpression lysate (Cat# [LY416853]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215294 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).