

Product datasheet for **RG219187**

Iduronate 2 sulfatase (IDS) (NM_000202) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Iduronate 2 sulfatase (IDS) (NM_000202) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Iduronate 2 sulfatase
Synonyms:	ID2S; MPS2; SIDS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG219187 representing NM_000202
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCCCACCCCGACCGCCGAGGCCTTCTCTGGCTGGTCTGGTTCTGAGCTCCGTCTCGCTCGCCC
 TCGGATCCGAAACGCAGGCCAACTCGACCACAGATGCTCTGAACGTTCTTCTCATCATCGTGGATGACCT
 CGCCTCCCTCCCTGGGCTGTTATGGGGATAGCTGGTGAGGTCCCCAAATATTGACCAACTGGCATCCAC
 AGCCTCCTCTCCAGAATGCCTTTGCGCAGCAAGCAGTGTGCGCCCCGAGCCGCTTTCTTCTCACTG
 GCAGGAGACCTGACACCACCCGCTGTACGACTTCAACTCCTACTGGAGGGTGCACGCTGAAAATTCTC
 CACCATCCCCAGTACTCAAGGAGAATGGCTATGTGACCATGTCGGTGGGAAAAGTCTTCCACCCTGGG
 ATATCTTCTAACCATACCGATGATTCTCCGTATAGCTGGTCTTTCCACCTTATCATCTTCTCTGAGA
 AGTATGAAAACACTAAGACATGTCGAGGGCCAGATGGAGAATCCATGCCAACCTGCTTTGCCCTGTGGA
 TGTGCTGGATGTTCCCGAGGGCACCTTGCTGACAAACAGAGCACTGAGCAAGCCATACAGTTGTTGGAA
 AAGATGAAAACGTCAGCCAGTCTTTCTTCTGGCCGTTGGGTATCATAAGCCACACATCCCTTCAGAT
 ACCCAAGGAATTCAGAAAGTTGTATCCCTTGGAGAATCACCCTGGCCCCGATCCCGAGGTCCTCGA
 TGGCCTACCCCTGTGGCCTACAACCCCTGGATGGACATCAGGCAACGGGAAGACGTCCAAGCCTTAAAC
 ATCAGTGTGCCGTATGGTCCAATTCCTGTGGACTTTCAGCGGAAAATCCGCCAGAGCTACTTTGCCCTGTG
 TGTCAATTTGGATACACAGGTCGGCCGCTCTTGGTGTCTTGGACGATCTTACGCTGGCCAACAGCAC
 CATCATTGCATTTACCTCGGATCATGGTGGGCTCTAGGTGAACATGGAGAATGGCCAAATACAGCAAT
 TTTGATGTTGCTACCCATGTTCCCTGATTTCTATGTTCTGGAAGGACGGCTTCACTTCCGGAGGCAG
 GCGAGAAGCTTTCCCTTACCTCGACCTTTTGTGATTCCGCTCACAGTTGATGGAGCCAGGCAGGCAATC
 CATGGACCTTGTGGAACCTTGTGTCTTTTTCCACGCTGGCTGGACTTGCAGGACTGCAGGTTCCACCT
 CGCTGCCCGTTCCTTATTTCACGTTGAGCTGTGCAGAGAAGGCAAGAACCTTCTGAAGCATTTTCGAT
 TCCGTGACTTGGAAAGAGGATCCGTACCTCCCTGGTAATCCCGTGAAGTATTGCCTATAGCCAGTATCC
 CCGGCTTCAGACATCCCTCAGTGGAAATCTGACAAGCCGAGTTAAAAGATATAAAGATCATGGCTAT
 TCCATACGCACCATAGACTATAGGTACTGTGTGGTGGCTTCAATCCTGATGAATTTCTAGCTAACT
 TTTCTGACATCCATGCAGGGGAAGTATTTTGTGGATTCTGACCCATTGCAGGATCACAATATGTATAA
 TGATCCCAAGGTGGAGATCTTTCCAGTTGTTGATGCCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG219187 representing NM_000202
 Red=Cloning site Green=Tags(s)

MPPPRTRGRLLWLGLVLSVVCVALGSETQANSTTDALNVLIIIVDDLRLPSLGCYGDKLVRSFNIDQLASH
 SLLLFQNAFAQQAVCAPSRVSFLTGRRPDTRLYDFNSYWRVHAGNFSTIPQYFKENGYVTMSVGKVFHPG
 ISSNHTDDSPYSWSFPPYHPSSEKYENTKTCRGPDGELHANLLCPVDVLDVPEGTLDPKQSTEQAIQLE
 KMKTSASPFLLAVGYHKPHIPFRYPKEFQKLYPLENITLAPDPEVPDGLPPVAYNPWMDIRQREDVQALN
 ISVPYGPVDFQKIRQSYFASVSYLDTQVGRLLSALDDLQLANSTIIAFTSDHWALGEHGEWAKYSN
 FDVATHVPLIFYVPGRTASLPEAGEKLPYLDPFDSASQLMEPGRQSMDELVELVSLFPTLAGLAGLQVPP
 RCPVPSFHVELCREGKNLLKHFRFRDLEEDPYLPGNPRELIAYSQYPRPSDIPQWNSDKPSLKDIIKIMGY
 SIRTIDYRYTVWVGFNPDEFANFSDIHAGELYFVSDPLQDHNMYNDSQGGDLFQLLMP

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_000202

ORF Size: 1650 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_000202.8](#)

RefSeq Size: 2504 bp

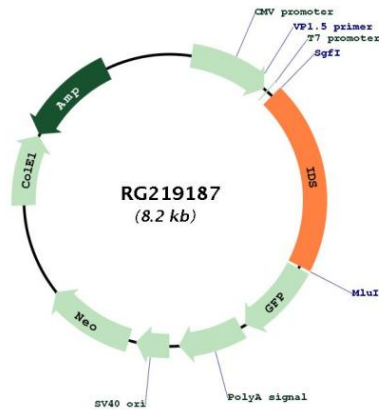
RefSeq ORF: 1653 bp

Locus ID: 3423

UniProt ID: [P22304](#)

Cytogenetics:	Xq28
Domains:	Sulfatase
Protein Families:	Druggable Genome
Protein Pathways:	Glycosaminoglycan degradation, Lysosome, Metabolic pathways
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 RG219187