

Product datasheet for **RG230123**

Iduronate 2 sulfatase (IDS) (NM_001166550) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Iduronate 2 sulfatase (IDS) (NM_001166550) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IDS
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:

>RG230123 representing NM_001166550
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCTTTGCGCAGGAGACCTGACACCACCCGCTGTACGACTTCAACTCCTACTGGAGGTGCACGCTG
 GAAACTTCTCCACCATCCCCAGTACTTCAAGGAGAATGGCTATGTGACCATGTCGGTGGGAAAAGTCTT
 TCACCCTGGGATATCTTCTAACCATACCGATGATTCTCCGTATAGCTGGTCTTTCCACCTTATCATCCT
 TCCTCTGAGAAGTATGAAAACTAAGACATGTCGAGGGCCAGATGGAGAATCCATGCCAACCTGCTTT
 GCCCTGTGGATGTCTGGATGTTCCCGAGGGCACCTTGCCTGACAAACAGAGCACTGAGCAAGCCATAACA
 GTTGTGGAAAAGATGAAAACGTCAGCCAGTCTTTCTTCTGGCCGTTGGGTATCATAAGCCACACATC
 CCCTTCAGATACCCCAAGGAATTCAGAAGTTGTATCCCTGGAGAACATCACCTGGCCCCGATCCCG
 AGGTCCCTGATGGCTACCCCTGTGGCTACAACCCCTGGATGGACATCAGGCAACGGGAAGACGTCCA
 AGCCTTAAACATCAGTGTCCGATGGTCCAATTCCTGTGGACTTTCAGCGGAAAATCCGCCAGAGCTAC
 TTTGCCTCTGTGCATATTTGGATACACAGGTCGGCCGCCTCTTGAGTGTCTTGGACGATCTTCAGCTGG
 CCAACAGCACCATCATTGCATTTACCTCGATCATGGGTGGGCTCTAGGTGAACATGGAGAAATGGGCCAA
 ATACAGCAATTTTGTGTTGCTACCCATGTTCCCTGATATTCTATGTTCTGGAAGGACGGCTTCACTT
 CCGGAGGCAGGCGAGAAGCTTTCCCTTACCTCGACCCTTTGATTCCGCCTCACAGTTGATGGAGCCAG
 GCAGGCAATCCATGGACCTTGTGGAAGTGTGTCTTTTTCCACGCTGGCTGGACTTGCAGGACTGCA
 GGTTCCACCTCGTGCCTTCCCTTCAATTCAGTGTGAGCTGTGCAGAGAAGGCAAGAACCTTCTGAAG
 CATTTTCGATCCGTGACTTGAAGAGGATCCGTACCTCCCTGGTAATCCCGTGAAGTATTGCCTATA
 GCCAGTATCCCCGCTTCAGACATCCCTCAGTGAATTCGACAAGCCGAGTTTAAAAGATATAAAGAT
 CATGGGCTATTCCATACGCACCATAGACTATAGTATACTGTGTGGGTTGGCTTCAATCCTGATGAATTT
 CTAGCTAACTTTTCTGACATCCATGCAGGGAACTGATTTTGTGGATTCTGACCCATTGCAGGATCACA
 ATATGTATAATGATTCCAAGGTGGAGATCTTTCCAGTTGTTGATGCCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG230123 representing NM_001166550
 Red=Cloning site Green=Tags(s)

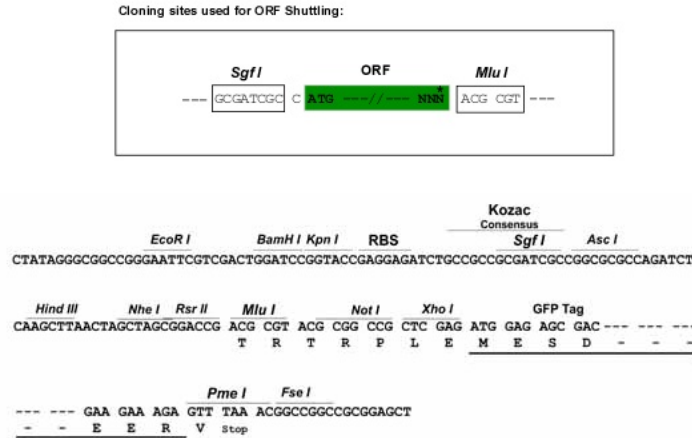
MPLRRRPDTRL YDFNSYWRVHAGNFSTIPQYFKENGYVTMSVGKVFHPGISSNHTDDSPYSWSFPPYHP
 SSEKYENTKTCRGPDELHANLLCPVDVLDVPEGLPDKQSTEQAIIQLEKMKTSASPFFLAVGYHKPHI
 PFRYPKEFQKLYPLENITLAPDPEVPDGLPPVAYNPWMDIRQREDVQALNISVPYGPVDFQRKIRQSY
 FASVSYLDTQVGRLLSALDDLQLANSTIIAFTSDHGVALGEHGEWAKYSNFDVATHVPLIFYVPGRTASL
 PEAGEKLFYPLDPFDSASQLMEPGRQSMDELVELVSLFPTLAGLAGLQVPPRCPVPSFHVELCREGKLLK
 HFRFRDLEEDPYLPGNPRELIAYSQYPRPSDIPQWNSDKPSLKDIIKIMGYSIRTIDYRYTVVWGFNPDEF
 LANFSDIHAGELYFVSDPLQDHMYNDSQGGDLFQLLMP

TRTRPLE - GFP Tag - V

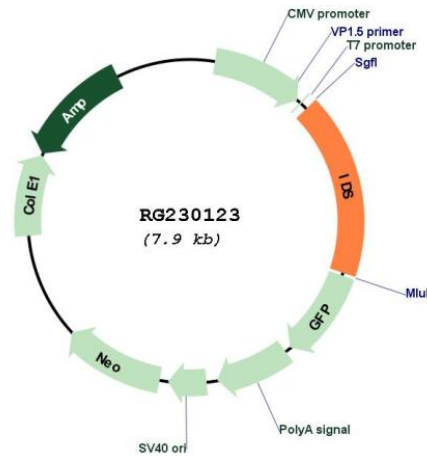
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001166550

ORF Size: 1380 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:	<ol style="list-style-type: none">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_001166550.4
RefSeq Size:	5832 bp
RefSeq ORF:	1383 bp
Locus ID:	3423
UniProt ID:	P22304
Cytogenetics:	Xq28
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]