

## Product datasheet for **RG219336**

### IDUA (NM\_000203) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IDUA (NM_000203) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IDUA
Synonyms:	IDA; MPS1; MPSI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG219336 representing NM\_000203  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGTCCCTGCGCCCCGCGCCGCGCTGCTGGCGCTCCTGGCCTCGTCTTGCCGCGCCCCCGTGG  
 CCCCGGCCGAGGCCCGCACCTGGTGCAGGTGGACGCGGCCCGCGCGCTGTGGCCCTGCGGCGCTTCTG  
 GAGGAGCACAGGCTTCTGCCCCCGCTGCCACACAGCCAGGCTGACCAGTACGTCCTCAGCTGGGACCAG  
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 GCCTTCTGAGCTACCACCCGCACCCCTTCGCGCAGCGCAGCTCACCGCGCGTCCAGGTCAACAACA  
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 CAGCCCAGACACAGGTGCTGTCTCTGGCTCCTACCGAGTTCGAGCCCTGGACTACTGGGCCCCAGCAGG  
 CCTTCTCGGACCTGTGCCGTACTGGAGTCCCTGTGCCAAGAGGGCCCCATCCCCGGGCAATCCA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG219336 representing NM\_000203  
 Red=Cloning site Green=Tags(s)

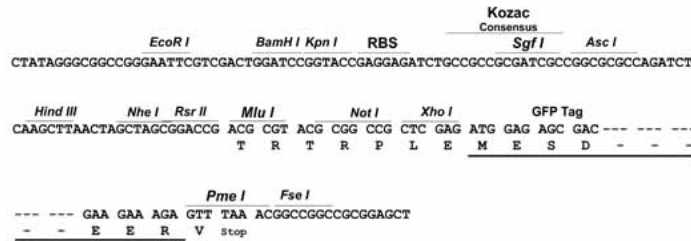
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 GRPVFPTAEQFRMRAAEDPVAAAPRPLPAGGRLTLRPALRLPSLLLHVHVCARPEKPPGQVTRLRALPLT  
 QQQLVLVWSEHVGSKCLWTYEIQFSQDGKAYTPVSRKPSTFNLVVFSPDTGAVSGSYRVRALDYWARPP  
 PFSDPVPYLEVPVPRGPPSPGNP

SGP**TRTRRLE** - GFP Tag - V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_000203

**ORF Size:** 1959 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_000203.2](#), [NP\\_000194.1](#)

**RefSeq Size:** 2197 bp

**RefSeq ORF:** 1962 bp

**Locus ID:** 3425

**UniProt ID:** [P35475](#)

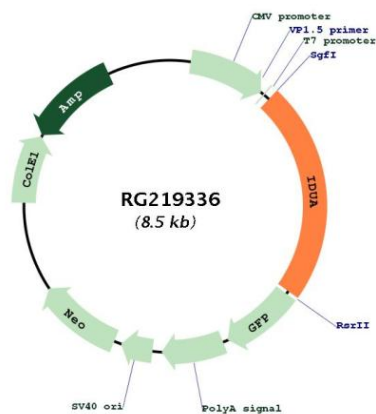
**Cytogenetics:** 4p16.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Glycosaminoglycan degradation, Lysosome, Metabolic pathways

**Gene Summary:** 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). [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG219336