

Product datasheet for **RG238196**

beta glucuronidase (GUSB) (NM_001293105) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	beta glucuronidase (GUSB) (NM_001293105) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GUSB
Synonyms:	BG; MPS7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238196 representing NM_001293105. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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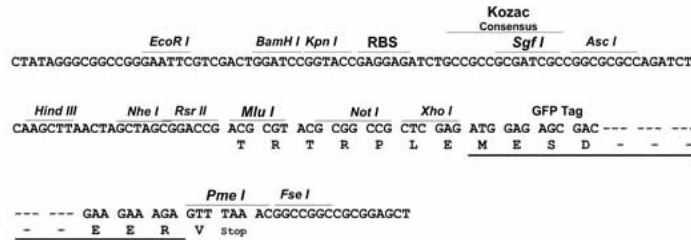
Protein Sequence: >Peptide sequence encoded by RG238196
 Blue=ORF Red=Cloning site Green=Tag(s)

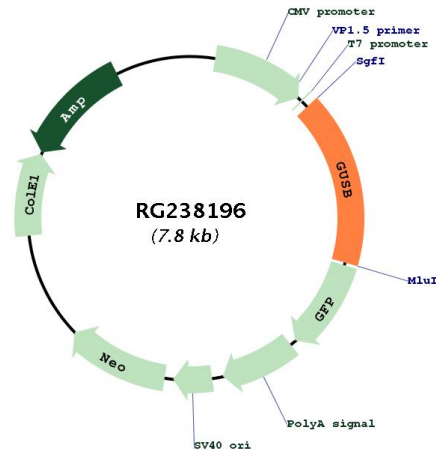
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 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001293105

ORF Size: 1296 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).

RefSeq: [NM_001293105.2](#)

RefSeq Size: 1985 bp

RefSeq ORF: 1299 bp

Locus ID: 2990

UniProt ID: [P08236](#)

Cytogenetics: 7q11.21

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Drug metabolism - other enzymes, Glycosaminoglycan degradation, Lysosome, Metabolic pathways, Pentose and glucuronate interconversions, Porphyrin and chlorophyll metabolism, Starch and sucrose metabolism

MW: 50.1 kDa

Gene Summary:

This gene encodes a hydrolase that degrades glycosaminoglycans, including heparan sulfate, dermatan sulfate, and chondroitin-4,6-sulfate. The enzyme forms a homotetramer that is localized to the lysosome. Mutations in this gene result in mucopolysaccharidosis type VII. Alternative splicing results in multiple transcript variants. There are many pseudogenes of this locus in the human genome.[provided by RefSeq, May 2014]