

Product datasheet for **RG208600**

NAGLU (NM_000263) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NAGLU (NM_000263) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NAGLU
Synonyms:	CMT2V; MPS-IIIB; MPS3B; NAG; UFHSD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG208600 representing NM_000263
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGCGGTGGCGGTGGCCGCGCGGTGGGGTCTTCTCCTGGCCGGGGCCGGGGCCGCGGCAGGCG
 ACGAGGCCGGGAGGCGCGGCCGTGCGGGCGCTCGTGGCCCGGCTGCTGGGGCCAGGCCCGCGGCCGA
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 GTCTTCCAACCTGGAGCAGGCTTCTGTTCTCAGCAAGCAGAGGTACCCAGCCAGCCGCGAGGAGACTG
 TGGACCTGGCCAAGAAGATCTTCTCAAATATTACCCCGGCTGGTGGCCGGCTCTTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG208600 representing NM_000263
 Red=Cloning site Green=Tags(s)

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MEAVAVAAAVGVLLLAGAGGAAGDEAREAAAVRALVARLLGPGPAADFVSVERALAAKPLDITYSLGGG
GAARVVRVGSTGVAAAAGLHRYLRDFCGCHVAWSGSQLRLPRPLPAVPGELTEATPNRYRYQNVCTQSY
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GAAWRLLLRSVYNCSEACRGNRSPLVRRPSLQMNSTIWIYNRSDVFEAWRLLLTSAPSLATSPAFRYDL
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SEAEADFEQNSRYQLTLWGPEGNILDYANKQLAGLVANYYTTPRWRLFLEALVDSVAQGIQFQHQFQDKN
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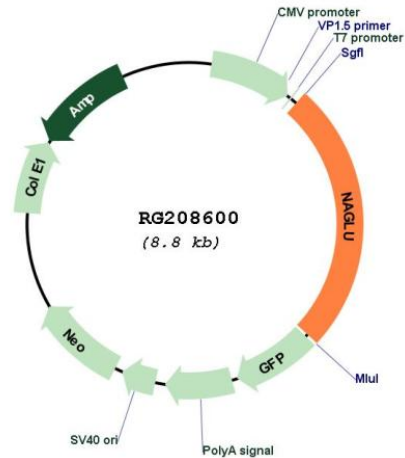
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_000263

ORF Size: 2229 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 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:	<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_000263.2
RefSeq Size:	2798 bp
RefSeq ORF:	2232 bp
Locus ID:	4669
UniProt ID:	P54802
Cytogenetics:	17q21.2
Domains:	NAGLU
Protein Families:	Druggable Genome
Protein Pathways:	Glycosaminoglycan degradation, Lysosome, Metabolic pathways
Gene Summary:	This gene encodes an enzyme that degrades heparan sulfate by hydrolysis of terminal N-acetyl-D-glucosamine residues in N-acetyl-alpha-D-glucosaminides. Defects in this gene are the cause of mucopolysaccharidosis type IIIB (MPS-IIIB), also known as Sanfilippo syndrome B. This disease is characterized by the lysosomal accumulation and urinary excretion of heparan sulfate. [provided by RefSeq, Jul 2008]