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Product datasheet for RC208600

NAGLU (NM_000263) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NAGLU (NM_000263) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NAGLU
Synonyms:	CMT2V; MPS-IIIB; MPS3B; NAG; UFHSD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC208600 representing NM_000263
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGGCGGTGGCGGTGGCCGCGGCGGTGGGGGTCCTTCTCCTGGCCGGGGCCGGGGGCGCGGCAGGCG
ACGAGGCCCGGGAGGCGGCGGCCGTGCGGGCGCTCGTGGCCCGGCTGCTGGGGCCAGGCCCCGCGGCCGA
CTTCTCCGTGTCGGTGGAGCGCGCTCTGGCTGCCAAGCCGGGCTTGGACACCTACAGCCTGGGCGGCGGC
GGCGCGGCGCGCGTGCGGGTGCGCGGCTCCACGGGCGTGGCGGCCGCCGCGGGGCTGCACCGCTACCTGC
GCGACTTCTGTGGCTGCCACGTGGCCTGGTCCGGCTCTCAGCTGCGCCTGCCGCGGCCACTGCCAGCCGT
GCCGGGGGAGCTGACCGAGGCCACGCCCAACAGGTACCGCTATTACCAGAATGTGTGCACGCAAAGCTAC
TCCTTCGTGTGGTGGGACTGGGCCCGCTGGGAGCGAGAGATAGACTGGATGGCGCTGAATGGCATCAACC
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AGAGATCAATGAGTTCTTTACTGGTCCTGCCTTCCTGGCCTGGGGGCGAATGGGCAACCTGCACACCTGG
GATGGCCCCCTGCCCCCCTCCTGGCACATCAAGCAGCTTTACCTGCAGCACCGGGTCCTGGACCAGATGC
GCTCCTTCGGCATGACCCCAGTGCTGCCTGCATTCGCGGGGCATGTTCCCGAGGCTGTCACCAGGGTGTT
CCCTCAGGTCAATGTCACGAAGATGGGCAGTTGGGGCCACTTTAACTGTTCCTACTCCTGCTCCTTCCTT
CTGGCTCCGGAAGACCCCATATTCCCCATCATCGGGAGCCTCTTCCTGCGAGAGCTGATCAAAGAGTTTG
GCACAGACCACATCTATGGGGCCGACACTTTCAATGAGATGCAGCCACCTTCCTCAGAGCCCTCCTACCT
TGCCGCAGCCACCACTGCCGTCTATGAGGCCATGACTGCAGTGGATACTGAGGCTGTGTGGCTGCTCCAA
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CCAGGGCCAGCCCTTCATCTGGTGCATGCTGCACAACTTTGGGGGAAACCATGGTCTTTTTGGAGCCCTA
GAGGCTGTGAACGGAGGCCCAGAAGCTGCCCGCCTCTTCCCCAACTCCACCATGGTAGGCACGGGCATGG
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ACATCCTGGACTATGCCAACAAGCAGCTGGCGGGGTTGGTGGCCAACTACTACACCCCTCGCTGGCGGCT
TTTCCTGGAGGCGCTGGTTGACAGTGTGGCCCAGGGCATCCCTTTCCAACAGCACCAGTTTGACAAAAAT
GTCTTCCAACTGGAGCAGGCCTTCGTTCTCAGCAAGCAGAGGTACCCCAGCCAGCCGCGAGGAGACACTG
TGGACCTGGCCAAGAAGATCTTCCTCAAATATTACCCCCGCTGGGTGGCCGGCTCTTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208600 representing NM_000263
Red=Cloning site Green=Tags(s)

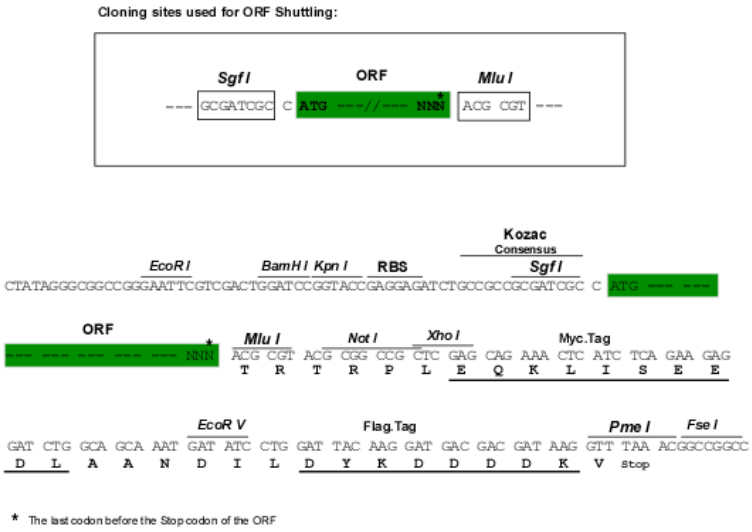
MEAVAVAAAVGVLLLAGAGGAAGDEAREAAAVRALVARLLGPGPAADFSVSVERALAAKPGLDTYSLGGG
GAARVRVRGSTGVAAAAGLHRYLRDFCGCHVAWSGSQLRLPRPLPAVPGELTEATPNRYRYYQNVCTQSY
SFVWWDWARWEREIDWMALNGINLALAWSGQEAIWQRVYLALGLTQAEINEFFTGPAFLAWGRMGNLHTW
DGPLPPSWHIKQLYLQHRVLDQMRSFGMTPVLPAFAGHVPEAVTRVFPQVNVTKMGSWGHFNCSYSCSFL
LAPEDPIFPIIGSLFLRELIKEFGTDHIYGADTFNEMQPPSSEPSYLAAATTAVYEAMTAVDTEAVWLLQ
GWLFQHQPQFWGPAQIRAVLGAVPRGRLLVLDLFAESQPVYTRTASFQGQPFIWCMLHNFGGNHGLFGAL
EAVNGGPEAARLFPNSTMVGTGMAPEGISQNEVVYSLMAELGWRKDPVPDLAAWVTSFAARRYGVSHPDA
GAAWRLLLRSVYNCSGEACRGHNRSPLVRRPSLQMNTSIWYNRSDVFEAWRLLLTSAPSLATSPAFRYDL
LDLTRQAVQELVSLYYEEARSAYLSKELASLLRAGGVLAYELLPALDEVLASDSRFLLGSWLEQARAAAV
SEAEADFYEQNSRYQLTLWGPEGNILDYANKQLAGLVANYYTPRWRLFLEALVDSVAQGIPFQQHQFDKN
VFQLEQAFVLSKQRYPSQPRGDTVDLAKKIFLKYYPRWVAGSW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1772_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

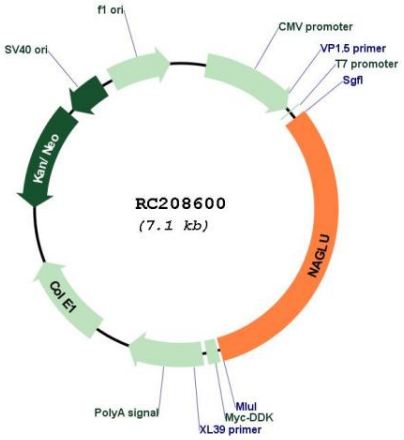


ACCN: NM_000263

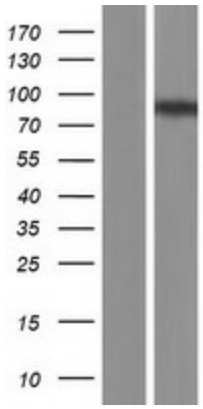
ORF Size: 2229 bp

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:	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_000263.4
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
MW:	82.27 kDa
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]

Product images:



Circular map for RC208600



Western blot validation of overexpression lysate (Cat# [LY424833]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208600 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).