

Product datasheet for **RC203447**

NGLY1 (NM_018297) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NGLY1 (NM_018297) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NGLY1
Synonyms:	CDDG; CDG1V; PNG-1; PNG1; PNGase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC203447 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGGCGGCCATTGGGCAGCTCCTCAGGCTCGGCGTCCCGGCCGTGGCTGAGCTCTGCCAGAACA
 CCCCGGAGACCTTTTGGAGGCCTCCAAGCTGCTGCTCACCTATGCTGACAAACATCCTCAGAAACCTAA
 TGATGAAAAATATAGATCCATCCGGATTGGAAACACAGCCTTTTCTACTAGACTCTTGCCTGTCAGAGGA
 GCTGTTGAATGTTTATTTGAAATGGGCTTTGAAGAGGGAGAAACACATCTCATCTTCTAAAAAAGCTT
 CAGTGGAGCAGCTGCAAAAAATTCGTGACCTGATTGCCATAGAGAGAAGTAGCAGACTGGATGGCTCAAA
 TAAGAGCCACAAAGTAAAGTCATCTCAGCAACCTGCAGCCAGTACCCAGCTTCTACAACACCATCTTCA
 AATCCCAGTGGGTTAAACCAGCACACAAGGAACCGTCAAGGGCAGTCATCAGATCCACCATCTGCTTCAA
 CGGTTGCTGCTGACTCAGCCATTCTAGAAGTCTTCAGTCCAACATTCAGCATGTGCTGGCTATGAAAA
 TCCTGCTCTTCAGGAGAAAGCGTTGGCTTGTATCCGGTCCAAGAATAAAAAGGAAATCACAAGAAAAG
 TTATCGAGAGCTAGAAAATTGGATAAAGGTATCAATATAAGTGATGAGGATTTTCTTTTGGCTGGAGCTTT
 TGCACTGGTTAAGGAAGAATTTTTCACTGGGTGAATAACGTTTTGTGCAGCAAATGTGGTGGACAGAC
 TAGGTCTAGAGATAGATCATTACTGCCAGTGATGATGAGCTGAAGTGGGGTGCAAAGGAAGTGAAGAT
 CATTACTGTGATGCCTGCCAGTTCAGCAATCGATTCCCAAGATATAATAACCCTGAGAACTTTTGGAAA
 CAAGATGTGGACGGTGTGGCGAGTGGGCCAATTGTTTTACACTGTGCTGCCGAGCTGTAGGGTTTGAAGC
 TCGCTATGTTTGGGATTACACAGACCATGTCTGGACAGAAGTCTATTCTCCTTCTCAGCAGCGGTGGCTG
 CACTGTGATGCATGTGAAGATGTCTGTGACAAGCCACTCCTTTATGAAATAGGATGGGGCAAGAAGCTTT
 CCTATGTCATAGCATTTCAAAAGATGAGGTAGTTGATGTCACCTGGCGATATTCCTGCAACATGAAGA
 GGTGATTGCCAGAAGAATAAGGTTAAAGAAGCATTACTTCGAGACACTATTAATGGGCTTAATAAGCAG
 AGGCAACTGTTTTTGTGCAAAAAACAGAAGGAAAGAACTTCTCCAGAGGATAATTGTGGAGCTTGTGAAT
 TTATATCTCCAAAACCCCTAAACCTGGAGAACTGGGGGAAGAATATCTGGGTCAGTGGCTTGGAGAGT
 AGCCCCGAGGTGAAATGGGTCTACAGAGAAAAGAAACCTTGTATTCCCTGTGAAATGAGAAGATTTCT
 AAACAGCTCCACCTTTGTTACAATATTGTGAAAGATCGTTATGTTGAGTTTCAAATAACAATCAAACCA
 TTTCTGGATGGGAGAATGGCGTGTGAAAATGGAATCTATATTCAGAAAAGTTGAAACAGACTGGCACAT
 GGTATATTTGGCCGAAAGGAAGGATCATCTTTTGCTTATATTCCTGGAAGTTGAGTGTGGGTCAGTT
 GGCCTAAAAGTAGATAGCATTCTATTAGAACAAGTAGTCAAACCTTTTCAGACTGGAACAGTAGAATGGA
 AATTGCGATCTGATACAGCACAAGTAGAACTGACAGGCGATAACAGTCTTCACTCCTATGCTGATTTTTC
 TGGTGCCACTGAAGTATTTTGGAAAGCAGAATTAAGCAGAGGAGATGGTGATGTCGCTTGGCAACACACC
 CAGCTGTTTAGACAAAGCTTAAATGACCATGAAGAAAATTGTTTGGAGATAAATTAAAAATTCAGTGACC
 TT

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203447 protein sequence
 Red=Cloning site Green=Tags(s)

MAAAALGSSSGSASPVAELCQNTPETFLEASKLLLTYADNILRNPNDEKYRSIRIGNTAFSTRLLPVRG
 AVECLFEMGFEEGETHLIFPKASVEQLQKIRDLIAIERSRLDGSNKSHKVKSSQQAASSTQLPTTPSS
 NPSGLNQHTRNRQGQSSDPPSASTVAADSAILEVLQSNIQHVLVYENPALQEALACIPVQELKRKSQEK
 LSRARKLDKGINISDEDFLLLELLHWFKEEFHFWVNNVLCCKGGQTRSRDRSLLPDDELKWKAKEVED
 HYCDACQFSNRFPRYNNPEKLETRCGRCGEWANCFTLCCRAVGFARYVWDYTDHWVTEVYSPSQRWL
 HCDACEDVCDKPLLIEIGWGKLSYVIAFSKDEVVDVTWRYSCHEEVIARRTKVKEALLRDTINGLNKQ
 RQLFLSENRRKELLQRIIVELVEFISPKTPKPGELGGRISGSVAWRVARGEMGLQRKETLIPCENEKIS
 KQLHLCYNIKDRYVRVSNNNQTSWENGVWKMESIFRKVETDWHMVYLARKEGSSFAYISWKFECGSV
 GLKVDSISIRTSSQTFQTGTVEWKLRSDTAQVELTGDNSLHSYADFSGATEVILEAELSRGDDVAWQHT
 QLFRQSLNDHEENCLEIIIKFSDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_018297

ORF Size: 1965 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_018297.4](#)

RefSeq Size: 2534 bp

RefSeq ORF: 1965 bp

Locus ID: 55768

UniProt ID: [Q96IV0](#)

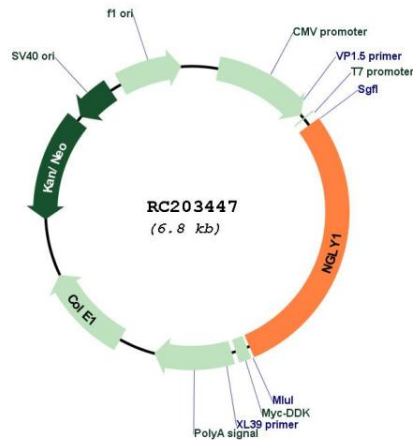
Cytogenetics: 3p24.2

Domains: TGc, PUG, PAW

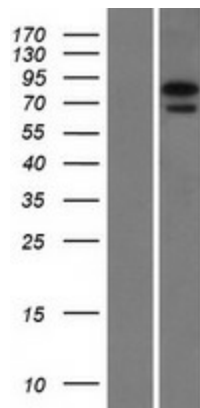
MW: 74.4 kDa

Gene Summary: This gene encodes an enzyme that catalyzes hydrolysis of an N(4)-(acetyl-beta-D-glucosaminy) asparagine residue to N-acetyl-beta-D-glucosaminyamine and a peptide containing an aspartate residue. The encoded enzyme may play a role in the proteasome-mediated degradation of misfolded glycoproteins. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Feb 2009]

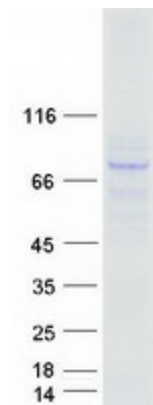
Product images:



Circular map for RC203447



Western blot validation of overexpression lysate (Cat# [LY413145]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203447 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NGLY1 protein (Cat# [TP303447]). The protein was produced from HEK293T cells transfected with NGLY1 cDNA clone (Cat# RC203447) using MegaTran 2.0 (Cat# [TT210002]).