

Product datasheet for **MR209772**

Ngly1 (NM_021504) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ngly1 (NM_021504) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ngly1
Synonyms:	1110002C09Rik; Png1; PNGase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR209772 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCGGCCACACTGGGCAGCTCGTCGAGCTCTGCGTCCCGGCCGTGGCCGAGCTATGCCAGAACA
CCCCGGAGACCTTCTGGAGGCCTCCAAGCTGCTGCTCACCTACGCCGACAAACATCCTGAGAAACCCAG
TGATGAAAAATACAGATCCATCCGTATTGGGAACACAGCGTTTTCTACTAGACTCTTGCCTGTCAGAGGA
GCTGTTGAGTGTTATTTGAAATGGGCTTTGAAGAGGGAGAAACGCATCTTATCTTCTAAAAAGCTT
CAGTGGAAACAGCTACAGAAAATCCGTGATCTGATTGCCATAGAGAGAAGCAGCAGACTGGACGGATCCAG
TAAGAAGGTGCAATCTCTCAGCACCCGGCTGCTGCCAAGCTTCTCTGGAGCAGCTGAAGATCCTGCT
GGGTTAATACGGCACTCAGGAAACCAACAGGGCAGCTGCCAAGCCTACCCTCTGCTCCAATGGTTGTTG
GTGATTCAACCATCTTAAAAGTTCTTCAGTCCAACATTCAGCATGTGCAGCTCTATGAAAACCTGTCT
CCAGGAGAAAGCATTGACTTGTATCCCAGTCAGTGAACAAAAAGAAAAGCTCAAGAAAAGTTATTCAGA
GCTAGAAAAGTTAGATAAAGGTACTAATGTAAGTGATGAGGACTTCTTCTACTGGAGCTCCTACACTGGT
TTAAAGAGGAGTTTTTTCGCTGGTGAATAACATTGTGTGCAGCAAAATGGTGGAGAGACTAGATCTAG
AGATGAGGCATTGCTGCCAATGATGATGAACTGAAGTGGGTGCAAAGAATGTGGAGAATCATTACTGT
GATGCCTGCCAGTTGAGCAACCGCTTCCAAGATATAACAACCCCGAGAACTTTTGGAAACAAGATGTG
GACGCTGTGGTGAATGGGCAATGTTTTACTCTGTGCTGCCGTGCATTAGGTTTGAAGCTCGATATGT
GTGGGATTACACAGACCATGTTTGGACAGAAGTCTATTCTCCATCTCAGCAGCGGTGGCTACACTGTGAT
GCATGTGAGGATGTCTGTGACAAACCCCTCCTTATGAAATAGGATGGGCAAGAAGCTTTCCTATATAA
TAGCATTCTCTAAAGATGAGGTAGTTGATGTCACCTGGCGATACTTGTAAACATGATGAGGTGATGTC
CAGGAGGACCAAGGTTAAAGAAGAGTTACTTCGAGAAACTATTAATGGGCTTAATAAGCAGAGACAGCTA
TCATTATCAGAAAAGCAGAAAGAAAGAACTTCTCCAGAGGATAATTGTGGAGCTTGTGAATTTATATCTC
CTAAAACCCCAAGACCTGGAGAACTTGGTGAAGGGTATCCGGTCATTGGCTTGGAGAGTGGCCCGAGG
TGAGACGGGTCTAGAGAGAAAGGAGATTCTGTTTCATCCCTTCTGAAAATGAAAAGATTTCTAAGCAGTTT
CACCTCCGTTATGATATTGTGAGAGACCGTTACATTCGTGTCTCAGACAACAACATAAACATTTCTGGAT
GGGAGAATGGTGTGTGAAAAATGGAATCCATATTCAGAAAAGTCGAGAAAGACTGGAACATGTTTTATTT
GGCCCGAAAAGAAGGATCATCTTTGCTTATATTTCTGGAAGTTTGAATGTGGGTGAGTGGTCTAAAA
GTAGATACTGTTCCATCCGCACAAGTAGCCAAAGCTTTGAGTCTGGATCAGTGAGGTGGAACCTGCGAT
CTGAGACAGCTCAAGTCAACCTGCTGGGAGATAAAAATCTACGTTCTATAATGATTTTTCTGGTCCAC
AGAGGTTACATTAGAAGCAGAGTTAAGCAGAGGAGATGGAGACGTTGCTTGGCAACATACCCAAGTGT
AGACAAAGCTTAATGACAGTGGAGAAAATGGCTTGGAAATAATTATAACGTTCAATGACCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209772 protein sequence
Red=Cloning site Green=Tags(s)

MASATLGSSSSASPVAELCQNTPETFLEASKLLLTYADNILRNPSDEKYRSIRIGNTAFSTRLLPVRG
 AVECLFEMGFEEGETHLIFPKASVEQLQKIRDLIAIERSRLDGSSKKVQFSQHPAAAKLPLEQSEDP
 GLIRHSGNQGTGLPLSPSAPMVVDSTILKVLQSNIQHVQLYENPVLQEKALTCIPVSELKRKAQEKLF
 ARKLDKGTNVSDDEFLLLELLHWFKEEFFRWVNNIVCSKCGGETRSRDEALLPNDDDELKWKAKNVENHYC
 DACQLSNRFRPRYNNPEKLETRCGRCEWANCFTLCCRALGFARYVWDYTDHVWTEVYSPSQRWLHCD
 ACEDVCDKPLL YEIGWGKLSYIIAFSKDEVVDVTWRYSCKHDEVMSRRTKVKEELLRETINGLNKQRQL
 SLSESRRKELLQRIIVELVEFISPKTPRPGELGGRVSGSLAWRVARGETGLERKEILFIPSENEKISKQF
 HLYRDIYRDRYIRVSDNNINISGWENGWVKMESIFRKVEKDWNMVYLARKEGSSFAYISWKFECCSAGLK
 VDTVSIRTSSQSFESGSRVWKL RSETAQVNL LGDKNLRSYNDFSGATEVTLEAELSRGDGDVAWQHTQLF
 RQSLNDSGENGLEIIITFNDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_021504

ORF Size: 1956 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).

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_021504.3](#)

RefSeq Size: 2901 bp

RefSeq ORF: 1956 bp

Locus ID: 59007

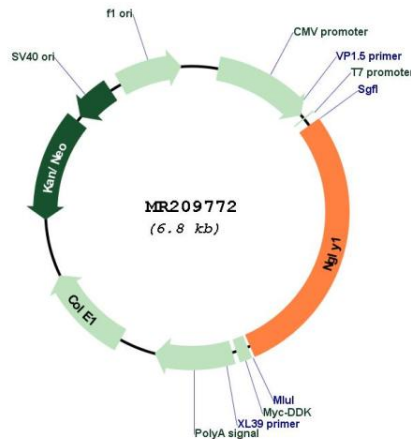
UniProt ID: [Q9JL78](#)

Cytogenetics: 14 7.08 cM

MW: 74.3 kDa

Gene Summary: Specifically deglycosylates the denatured form of N-linked glycoproteins in the cytoplasm and assists their proteasome-mediated degradation. Cleaves the beta-aspartyl-glucosamine (GlcNAc) of the glycan and the amide side chain of Asn, converting Asn to Asp. Prefers proteins containing high-mannose over those bearing complex type oligosaccharides. Can recognize misfolded proteins in the endoplasmic reticulum that are exported to the cytosol to be destroyed and deglycosylate them, while it has no activity toward native proteins. Deglycosylation is a prerequisite for subsequent proteasome-mediated degradation of some, but not all, misfolded glycoproteins.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209772