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Product datasheet for MG226156

Nhlrc1 (NM_175340) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nhlrc1 (NM_175340) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nhlrc1
Synonyms:	AI505271; B230309E09Rik; EPM2B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226156 representing NM_175340 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGGGAGGAGGCGACGGCGGTGGCAGCGGCTGGGGTGCGGCCCGAGCTGGTGCGGGAGGCGGAGGTCA GCCTGCTGGAGTGCAAGGTGTGCTTCGAGAGGTTCGGCCACTGGCAGCAGCGGCGCCCGCGCAACCTGCC CTGCGGCCACGTGGTCTGCTTGGCCTGTGTCGCCGCTCTCGCGCACCCGCGGACGCTGGGCCTGGAGTGT CCCTTCTGCCGGCGGGCCTGCCGAGCCTGTGACACCAGCGATTGCCTGCCGGTGCTGCACCTTCTGGAGC TCCTGGGCTCCACCCTCCACGCGTCCCCGGCTGCCCTCAGCGCCGCCCCCTTCGCGCCGGGGACTCTCAC CTGCTACCACGCCTTCGGCGGGTGGGGGACCCTAGTGAACCCCACAGGGCTTGCACTGTGCCCCAAGACC GGACGGGTAGTGGTCGTGCACGACGGGAAGAGACGGGTCAAGATCTTTGACTCCGGAGGAGGAGGTGCAC ACCAGTTTGGAGAAAAGGGGGACGCAGCGCACGACGTGAAGTACCCACTGGATGTCGCCGTCACCAACGA CTGCCATGTGGTTGTCACCGACGCTGGCGACTGCTCCCTCAAAGTGTTTGATTTCTTTGGCCAGATCAAG CTGGTTGTGGGAAAGCAGTTTTCCCTGCCTTGGGGTGTGGAGATCACCCCTCACAATGGGGTCCTGGTGA CTGATGCAGAGGCAGGGACTTTGCACCTGCTGGAAGCGGATTTCCCTGAAGGGGTCCTTCGGAGGATTGA GAGGTTGCAAGCTCACCTATGCAGTCCCCGTGGGTTGGCAGTGTCATGGCTCACCGGGGCCATCGCGGTC CTAGAGCATCCTTGTGCCTTTGGGAGGACTGGCTGTAACAACACAAGGGTGAAGGTGTTCAACTCCACTA TGCAGCTGATTGGCCAGGTGGATAGCTTCGGGCTGAACCTCCTCTTCCCCTCCAAAGTAACTGCCTCTGC TGTGACCTTCGATCACCAAGGAAACGTGATTGTTGCTGACACCTCTGGTCCAGCCATCGTCTGCTTGGGG AAACCCGAAGAATTCCCAGCCCTGAAGCCTATAATCACTCACGGCCTCTCCCGTCCTGTGGCACTGGCCT TCACCAAGGAGAATTCTCTTCTTGTGCTGGATACTGCATCCCATTCTATAAAAGTCTTTAAAGTGATGGA GGGCAACGGAGGG AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

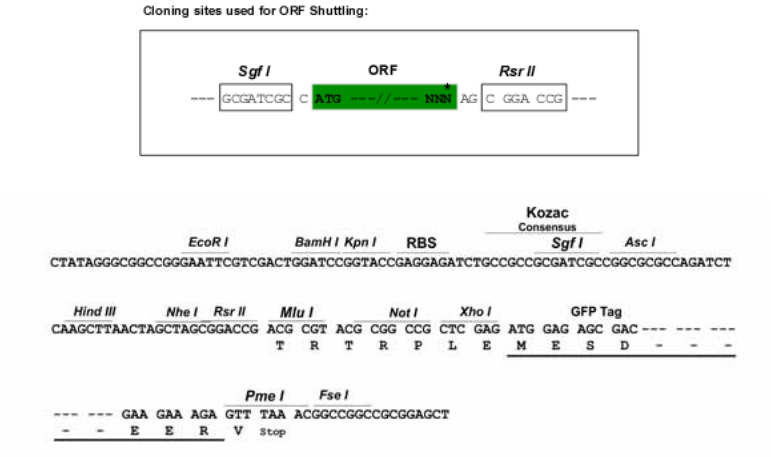
>MG226156 representing NM_175340
Red=Cloning site Green=Tags(s)

MGEEATAVAAAGVRPELVREAEVSLLECKVCFERFGHWQQRRPRNLPCGHVVCLACVAALAHPRTLGLEC
PFCRRACRACDTSDCLPVLHLLELLGSTLHASPAALSAAPFAPGTLTCYHAFGGWGTLVNPTGLALCPKT
GRVVVVHDGKRRVKIFDSGGGGAHQFGEKGDAAHDVKYPLDVAVTNDCHVVVTDAGDCSLKVFDFFGQIK
LVVGKQFSLPWGVEITPHNGVLVTDAEAGTLHLLEADFPEGVLRRIERLQAHLCSPRGLAVSWLTGAIAV
LEHPCAFGRTGCNNTRVKVFNSTMQLIGQVDSFGLNLLFPSKVTASAVTFDHQGNVIVADTSGPAIVCLG
KPEEFPALKPIITHGLSRPVALAFTKENSLLVLDTASHSIKVFKVMEGNGG

SGPTRTRRLE – GFP Tag – V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_175340

ORF Size: 1203 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_175340.4, NP_780549.1

RefSeq Size: 2308 bp

RefSeq ORF: 1206 bp

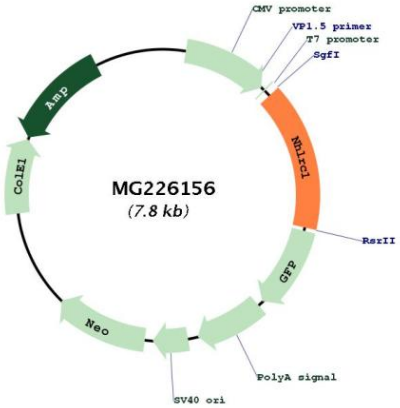
Locus ID: 105193

UniProt ID: Q8BR37

Cytogenetics: 13 A5

Gene Summary: E3 ubiquitin-protein ligase. Together with the phosphatase EPM2A/laforin, appears to be involved in the clearance of toxic polyglucosan and protein aggregates via multiple pathways. In complex with EPM2A/laforin and HSP70, suppresses the cellular toxicity of misfolded proteins by promoting their degradation through the ubiquitin-proteasome system (UPS). Ubiquitinates the glycogen-targeting protein phosphatase subunits PPP1R3C/PTG and PPP1R3D in a laforin-dependent manner and targets them for proteasome-dependent degradation, thus decreasing glycogen accumulation. Polyubiquitinates EPM2A/laforin and ubiquitinates AGL and targets them for proteasome-dependent degradation. Also promotes proteasome-independent protein degradation through the macroautophagy pathway. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226156