

Product datasheet for **MR202500**

Nol3 (NM_030152) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nol3 (NM_030152) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nol3
Synonyms:	ARC; B430311C09Rik; MYC; NOP; Nop30
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202500 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGGCAACGTGCAGGAGCGCCCATCAGAGACCATTGACCGGGAACGAAACGGCTGGTAGAGACATTGC
AGGCTGACTCTGGGCTGCTGCTGGATGCGCTGGTGGCCCGGGGCGTCCTCACTGGGCCCGAGTACGAAGC
CTTGATGCGCTGCCGATGCAGAGCGCAGGGTGCGCCGCCTACTGCTGTTGGTGCAGAGCAAGGGCGAG
GCAGCCTGCCAGGAGCTACTGCGCTGTGCCAGCAAACAGTGCAGATGCCAGACCCGGCCTGGGATTGGC
AGCACGTGGGGCCCGGCTACCGGAACCGCAGCTATGACCCTTCATGCCAGGCCACTGGACGCCAGAAGC
ACCCAGTTCAGGGACCACATGTCTGAGCTGCCAAGAGCGTCAGAGCAAGAGGAGTCCGAGGTCTCTGAG
GGCTCTGAGGCACTGCAGCCTCGAACTCCAGAGGAGCCAGAAGTGAAGCTACTGAAGGGGATG
AGCCAGACCTGGAACAAGAAATGAATCCAGAACAAGAGCCGGAGCCGGAGCCCGAGCCAGAACCCGAACCC
CGAGCCCGAGCCGGAACCCGAGCCCGAGCCAGAACCCGAGCCCGAGCCGGAACCCGAACCCGAGCCCGAC
TTCCAAGAAGAGGATGAATTTGAAGATTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR202500 protein sequence
Red=Cloning site Green=Tags(s)

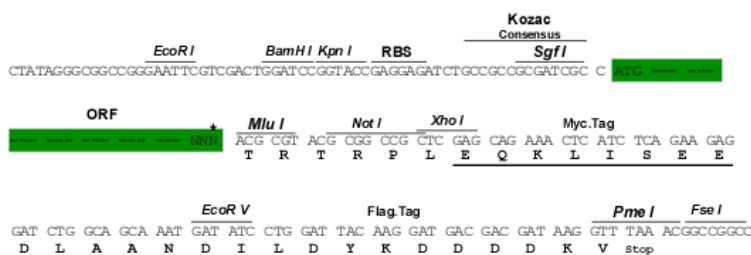
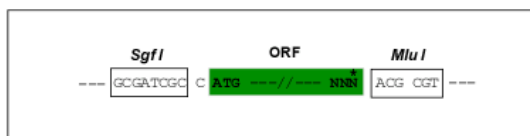
MGNVQERPSETIDRERKRLVETLQADSGLLLDALVARGVLTGPEYEALDALPDAERRVRRLLLLVQSKGE
AACQELLRCAQQTVRMPDPAWDQWQHVGPGRNRSYDPSCPGHWTPPEAPSSGTTCPPELPRASEQEEVGGPE
GSEALQPRTPPEPELEAEATEGDEPDLEQEMNPEQEPEPEPEPEPEPEPEPEPEPEPEPEPEPEPEPEPD
FOEEDEFEDS

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM 030152

ORF Size: 660 bp

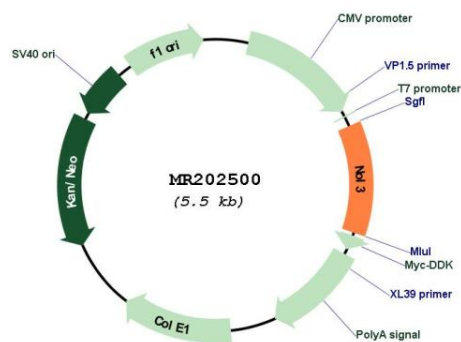
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_030152.1 , NM_030152.2 , NM_030152.3 , NM_030152.4 , NP_084428.1
RefSeq Size:	2869 bp
RefSeq ORF:	663 bp
Locus ID:	78688
UniProt ID:	Q9D1X0
Cytogenetics:	8 53.04 cM
MW:	24.6 kDa
Gene Summary:	<p>Apoptosis repressor that blocks multiple modes of cell death. Inhibits extrinsic apoptotic pathways through two different ways. Firstly by interacting with FAS and FADD upon FAS activation blocking death-inducing signaling complex (DISC) assembly (By similarity). Secondly by interacting with CASP8 in a mitochondria localization- and phosphorylation-dependent manner, limiting the amount of soluble CASP8 available for DISC-mediated activation (By similarity). Inhibits intrinsic apoptotic pathway in response to a wide range of stresses, through its interaction with BAX resulting in BAX inactivation, preventing mitochondrial dysfunction and release of pro-apoptotic factors (PubMed:16505176) (PubMed:24312627). Inhibits calcium-mediated cell death by functioning as a cytosolic calcium buffer, dissociating its interaction with CASP8 and maintaining calcium homeostasis (By similarity). Negatively regulates oxidative stress-induced apoptosis by phosphorylation-dependent suppression of the mitochondria-mediated intrinsic pathway, by blocking CASP2 activation and BAX translocation (By similarity). Negatively regulates hypoxia-induced apoptosis in part by inhibiting the release of cytochrome c from mitochondria in a caspase-independent manner (By similarity). Also inhibits TNF-induced necrosis by preventing TNF-signaling pathway through TNFRSF1A interaction abrogating the recruitment of RIPK1 to complex I (PubMed:24440909). Finally through its role as apoptosis repressor, promotes vascular remodeling through inhibition of apoptosis and stimulation of proliferation, in response to hypoxia (PubMed:22082675). Inhibits too myoblast differentiation through caspase inhibition (By similarity).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR202500