

## Product datasheet for MR205950

### NdrG1 (NM\_008681) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NdrG1 (NM_008681) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NdrG1
Synonyms:	CAP43; CMT4D; DRG1; HMSNL; Ndr1; NdrI; NMSL; PROXY1; RTP; TDD5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205950 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCCCAGAGCTACATGACGTGGACCTCGCTGAGGTGAAGCCTCTGGTGGAAAAGGGGAGAGCATCA  
CTGGTCTCCTGCAAGAGTTCGATGTTCCAGGAGCAGGATATTGAGACCCTACATGGCTCCCTGCATGTCAC  
CCTGTGTGGGACCCCAAGGGCAACCGTCTGTCATCCTCACGTATCACGACATCGGCATGAACCACAAG  
ACCTGCTACAACCCCTCTCAACTCTGAGGACATGCAGGAGATCACACAACATTTGCTGTCTGCCATG  
TGGATGCCCTGGCCAACAGGATGGTGGCCCTTCTTCCAGTGGGTACATGTACCCCTCAATGGATCA  
GTTGGCTGAAATGCTTCTGGAGTCCTTACCAGTTTGGGCTCAAGAGTGTATTGGCATGGGGACAGGA  
GCTGGCGCTACATCCTGACCCGCTTCCGACTCAACAACCTGAGATGGTAGAGGGTCTCGTGCTCATGA  
ATGTGAACCCCTGTGCTGAAGGCTGGATGGACTGGGCTGCCTCTAAGATCTCAGGATGGACCAAGCCCT  
GCCTGACATGGTGGTGTCCCACCTTTCGGCAAGGAGGAGATACACAACAACGTGGAGGTAGTGCACACG  
TACCGCCAGCACATCCTCAACGACATGAACCCGAGCAACCTACACTTATTCATCAGCGCCTACAACAGCC  
GGAGAGACCTGGAGATTGAGCGGCAATGCCTGGAACCCACACTGTCACCTTGCAGTGGCCTGCTCTGCT  
GGTAGTTGGAGACAACCTCTCTGCCGTGGATGCTGTGGTGAATGCAATTCTAAATTGGACCAACGAAG  
ACCACCCTGCTCAAGATGGCAGACTGTGGAGCCTTCTCAGATCTCTCAGCCCGCAAGCTTGGTGGAG  
CCTTCAAGTACTTTGTGAGGGCATGGGATACATGCCTTCTGCCAGCATGACTCGCCTGATGCGGTCCCG  
CACAGCCTCTGGCTCCAGTGTACATCCCTGGAGGGCACCCGTAGCCGCTCCCATACCAGCGAGGGCCCC  
CGAAGCCGCTCGCACACAGTGAGGGTCCCGTAGCCGCTCCCATACCAGTGAGGATGCCGCTCTCAACA  
TCACCCCAACTCGGGTCCACCGGAAACAATGCCGGGCCAAGTCCATGGAGGTGCTCTGC

**ACGGT**ACGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205950 protein sequence  
 Red=Cloning site Green=Tags(s)

MSRELHDVDLAEVKPLVEKGESITGLLQEFDVQEQDIETLHGSLHVTLCGTPKGNRPVILTYHDIGMNHK  
 TCYNPLFNSEDMQEITQHFVAVCHVDAPGQQDGAPSFVPGYMYPSMDQLAEMLPGLVHQFGLKSVIGMGTG  
 AGAYILTRFALNNPEMVEGLVLMNVNPCAEGWMDWAASKISGWTQALPDMVVSHLFGKEEIHNNVEVVHT  
 YRQHILNDMNPSNLHLFISAYNSRRDLEIERPMPGTHTVTLQCPALLVVDNSPAVDVAVVECNKLDPTK  
 TLLKMDCGGLPQISQPAKLAFAFKYFVQGMGYMPSASMTRLMRSRTASGSSVTSLEGTRRSRSHSEGP  
 RSRSHSEGRSRSRSHSEDLARLNIPTNSGATGNNAGPKSMEVSC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_008681

**ORF Size:** 1185 bp

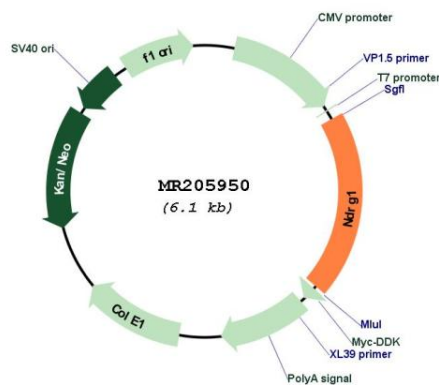
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_008681.2, NP_032707.2</u>
<b>RefSeq Size:</b>	2909 bp
<b>RefSeq ORF:</b>	1185 bp
<b>Locus ID:</b>	17988
<b>UniProt ID:</b>	<u>Q62433</u>
<b>Cytogenetics:</b>	15 D2
<b>MW:</b>	43 kDa
<b>Gene Summary:</b>	<p>Stress-responsive protein involved in hormone responses, cell growth, and differentiation. Acts as a tumor suppressor in many cell types. Necessary but not sufficient for p53/TP53-mediated caspase activation and apoptosis. Required for vesicular recycling of CDH1 and TF. May also function in lipid trafficking. Protects cells from spindle disruption damage. Functions in p53/TP53-dependent mitotic spindle checkpoint. Regulates microtubule dynamics and maintains euploidy (By similarity). Has a role in cell trafficking notably of the Schwann cell and is necessary for the maintenance and development of the peripheral nerve myelin sheath. [UniProtKB/Swiss-Prot Function]</p>

### Product images:



Circular map for MR205950