

Product datasheet for **MG204509**

Nde1 (BC021434) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nde1 (BC021434) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nde1
Synonyms:	NUDEL, MITAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204509 representing BC021434 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATGGTGAAGATATACCGGATTTTTCAAGTTTAAAGGAAGAACTGCTTATTGGAAGGAACTTCTCT
TGAAGTATAAGCAAAGCTTCCAGGAAGCTCGGGATGAGCTAGTTGAGTTCAGGAAGGAAGCAGAGAGTT
AGAAGCAGAGTTGGAGGCACAGTTAGTACAGGCTGAACAAAGAAATAGAGACCTGCAGGCTGATAACCAA
AGACTGAAGTATGAAGTGGAGGCGTTAAAGGAGAACTAGAGCATCAGTATGCACAGAGCTACAAGCAGG
TCTCAGTGTAGAAAGATGATTTAAGTCAGACCCGGGCCATTAAGGAGCAACTGCATAAGTATGTGAGAGA
GCTGGAGCAGGCCAATGATGACCTGGAGCGAGCAAAAAGGGCAACAATAGTTTCACTGGAAGACTTTGAA
CAAAGGCTAAATCAGGCCATTGAACGAAATGCATTCTTAGAAAAGTGAGCTCGATGAAAAGGAATCTTTGT
TGGTCTCAGTACAGAGGTTAAAGGATGAAGCCAGAGATTTAAGGCAAGAAGTACGAGTTCGGGAACGACA
ACAGGAAGTGACCCGCAAGTCTGCCCCAGCTCTCCAACCTCTGGACTGTGAGAAGATGGATTCTGCGGTC
CAGGCTTCACTCTCCTTGCCCTGCAACGCCTGTTGGGAAAGGCACAGAAAACAGTTTTCTTACCAAAGG
CTATACCAAACGGCTTTGGAACCAAGTCCACTAACTCCTTCTGCTAGGATATCAGCACTAACATCGTGGG
AGATCTCTTGCAGAAAGTAGGGGCTTTAGAATCCAAGTTAGCCGCTTGCAGGAACTTTGCAAAGACCAA
GCATCCCGCAAATCTTATGTTCCAGGGAGCGTTAACTGTGGGGTAAATGAACAGCAATGGCCAGAGTGCC
CAAGGTCAGGGCGAGCAACTTTCTTCCATAAAGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG204509 representing BC021434
 Red=Cloning site Green=Tags(s)

MDGEDIPDFSSSLKEETAYWKELSLKYKQSFQEARDELVEFQEGSRELEAELEAQLVQAEQRNRDLQADNQ
 RLKYEVEALKEKLEHQYAQSYKQVSVLEDDLSTRAIKEQLHKYVRELEQANDDLERAKRATIVSLEDFFE
 QRLNQAIERNAFLESELDEKESLLVSVQRLKDEARDLRQELAVRERQQEVTRKSAPSSPTLDCEKMDSAV
 QASLSLPATPVGKGTENSPKAIKPNFGTSPSARISALNIVGDLRLKVGALSKLAACRNFAKDQ
 ASRSYVPGSVNCGVMNSNGPECPRSGRATFFHKG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC021434

ORF Size: 947 bp

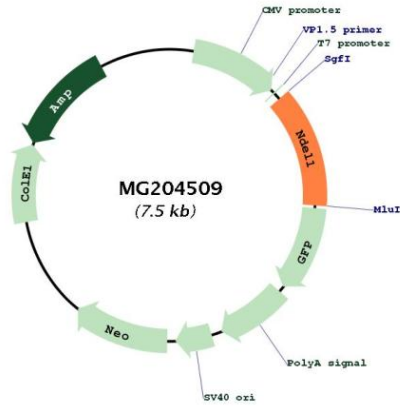
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
RefSeq:	BC021434 , AAH21434
RefSeq Size:	1654 bp
RefSeq ORF:	947 bp
Locus ID:	83431
Cytogenetics:	11 B3
Gene Summary:	<p>Required for organization of the cellular microtubule array and microtubule anchoring at the centrosome. May regulate microtubule organization at least in part by targeting the microtubule severing protein KATNA1 to the centrosome. Also positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus ends. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the centripetal motion of secretory vesicles and the coupling of the nucleus and centrosome. Also required during brain development for the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Plays a role, together with DISC1, in the regulation of neurite outgrowth. Required for mitosis in some cell types but appears to be dispensable for mitosis in cortical neuronal progenitors, which instead requires NDE1. Facilitates the polymerization of neurofilaments from the individual subunits NEFH and NEFL. Positively regulates lysosome peripheral distribution and ruffled border formation in osteoclasts (PubMed:27777970).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MG204509