

Product datasheet for **MR208551**

Nae1 (NM_144931) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nae1 (NM_144931) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nae1
Synonyms:	59kDa; Appbp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208551 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCAGCCAGGAAGATACTCAAGGAGCAAAAGTACGACCGCAGCTGAGGCTGTGGGTGATCATG
 GACAAGAAGCTTTGGAATCTGCTCATGTTTGTCTAATAAATGCAACGGCTACAGGAACTGAAATCTTAA
 AAACCTGGTGCTGCCAGGTATTGGATCATTACAATTATTGATGGAAATCTGGTCAGCGGAGAAGATGCT
 GGAAACAACCTTTTTCCTTCAAAAAGCAGTATTGGCAAGAACCGAGCTCAAGCTGCCATGGAATCTTAC
 AAGAACTAAATAGCGATGCTCTGGAAGTTTGTGGAAGAGAGTCCAGAAAACCTTCTAGACAATGATCC
 TTCATTTTCTGTAGGTTACTATTGTGGTTGCAACTCAGCTTCTTGAAAGTACATTGCTGCGTTTAGCA
 GATGTTCTCTGGAATCCAGATCCCTCTTTGATCTGTAGGACATATGGACTAGTTGGTTATATGAGGA
 TTATTATAAAGAACACCCAGTAATAGAATCTCATCCAGATAATGCATTGGAGGATCTACGACTAGATAA
 GCCATTTCTGAACTGAGAGAACATCTCAGTCTTATGACTTGGACCATATGGAAAAAAGACCATAGC
 CATACTCCATGGATTGTGATCATAGCTAAATTTAGCACAGTGGTATAATGAAACAAATGGACGGATTC
 CTAAGAGTTATAAAGAAAAAGAGGACTTCAGAGATTTGATAAGACAAGGGATTTAAAGAATGAAATGG
 AGCTCCAGAAGACGAAGAGAATTTGAAGAAGCCATCAAAAATGTGAACACAGCACTAAATACAACCTCAG
 ATCCCAAGCAGTATTGAAGATATATTAATGATGATCGATGCATAAATATCACCAACAGACACCAACTT
 TTTGGATTCTAGCTCGTGCCTTAAAGGAATTTGTGGCCAAGGAGGGTCAAGGAAATTTACCTGTCCGAGG
 CACAATTCCTGATGATGATTGCAGATTCAAACAATACATAAACTGCAGAATGTTTACCGAGAGAAAAGCA
 AAGAAAGATGCTGCTGTAGGCAATCACGTTGCCAAATTGCTTCAGTCTGTTGGCCAGGACCCAGAGT
 CCATTTCCAGAGAAAGAATTAATAATGCTTTGCGCAATTTCTGCATTTCTCGAGTGGTAAGATGCGATC
 TTTAGCTGAAGAGTATGGCTTGGATACAGTCAACAAAGATGAAATTTATTCTAGCATGGACAATCCGGAT
 AATGAGATAGTCCTGTACCTGATGTTGCGGGCTGTTGATCGATTTATAAACAGCATGGCAGATACCCAG
 GAGTATCTAACTATCAAGTTGAAGAAGATATAGGGAAGTTGAAGTCTGTCTTACTGGCTTCCTTCAGGA
 ATATGGGCTGTCTGTAATGGTGAAGACGATTATGTCCATGAATTTTCCGGTACGGAGCTGCTGAGCCA
 CACACCATTGCTGCGTTCCTGGGAGGAGCTGCTGCTCAAGAAGTTATCAAATAATCACCAACAATTCG
 TAATTTTAATAACTTATATTTATAGTGGTATGTCACAACTTCTGCAACTTCCAGTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208551 protein sequence
 Red=Cloning site Green=Tags(s)

MAQPGKILKEQKYDRQLRLWGDHGQEALES AHVCLINATATGTEILKNLVLPGIGSFTIIDGNLVSGEDA
 GNNFFLQKSSIGKNRAQAAMEFLQELNSDVSGSFVEESPENLLDNDPSFFCRFTIIVVATQLLESTLLRLA
 DVLWNSQIPLLICRTYGLVGYMRIIIEKHPVIESHPDNAEDLRDKPFPELREHLQSYDLDHMEKKDHS
 HTPWIVIIAKYLAQWYNETNGRIPKSYKEKEDFRDLIRQGILKNENGAPEDENFEAAIKNVNTALNTTQ
 IPSSIEDIFNDDRCINITKQPTFWILARALKEFVAKEGQGNLPVRGTIPDMIADSNKYIKLQNVYREKA
 KKDAAAVGNHVAKLLQSVQAPESISEKELKLLCSNSAFLRVVRCRSLAEEYGLDVTNKDEIISMDNPD
 NEIVLYMLRAVDRFHKQHGRYPGVSNYQVEEDIGKLSCLTGFLQEYGLSVMVKDDYVHEFCRYGAAEP
 HTIAAFLGGAAAQEVIKIITKQFVIFNNTYIYSGMSQTSATFQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_144931

ORF Size: 1605 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_144931.3](#)

RefSeq Size: 1808 bp

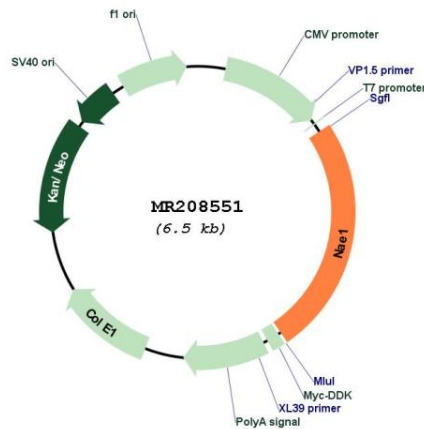
RefSeq ORF: 1605 bp

Locus ID: 234664

UniProt ID: [Q8VBW6](#)

Cytogenetics:	8 D3
MW:	60.3 kDa
Gene Summary:	Regulatory subunit of the dimeric UBA3-NAE1 E1 enzyme. E1 activates NEDD8 by first adenylating its C-terminal glycine residue with ATP, thereafter linking this residue to the side chain of the catalytic cysteine, yielding a NEDD8-UBA3 thioester and free AMP. E1 finally transfers NEDD8 to the catalytic cysteine of UBE2M. Necessary for cell cycle progression through the S-M checkpoint. Overexpression of NAE1 causes apoptosis through deregulation of NEDD8 conjugation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208551