

Product datasheet for **MG208551**

Nae1 (NM_144931) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nae1 (NM_144931) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nae1
Synonyms:	59kDa; Appbp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208551 representing NM_144931
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCAGCCAGGAAGATACTCAAGGAGCAAAAGTACGACCGCAGCTGAGGCTGTGGGTGATCATG
 GACAAGAAGCTTTGGAATCTGCTCATGTTTGTCTAATAAATGCAACGGCTACAGGAACTGAAATCTTAA
 AAACCTGGTGCTGCCAGGTATTGGATCATTACAATTATTGATGGAAATCTGGTCAGCGGAGAAGATGCT
 GGAAACAACCTTTTTCCTTCAAAAAGCAGTATTGGCAAGAACCGAGCTCAAGCTGCCATGGAATCTTAC
 AAGAACTAAATAGCGATGCTCTGGAAGTTTGTGGAAGAGAGTCCAGAAAACCTTCTAGACAATGATCC
 TTCATTTTCTGTAGGTTACTATTGTGGTTGCAACTCAGCTTCTTGAAAGTACATTGCTGCGTTTAGCA
 GATGTTCTCTGGAATCCAGATCCCTCTTTGATCTGTAGGACATATGGACTAGTTGGTTATATGAGGA
 TTATTATAAAGAACACCCAGTAATAGAATCTCATCCAGATAATGCATTGGAGGATCTACGACTAGATAA
 GCCATTTCTGAACTGAGAGAACATCTCAGTCTTATGACTTGGACCATATGGAAAAAAGACCATAGC
 CATACTCCATGGATTGTGATCATAGCTAAATTTAGCACAGTGGTATAATGAAACAAATGGACGGATTC
 CTAAGAAGTTATAAAGAAAAAGAGGACTTCAGAGATTTGATAAGACAAGGGATTTAAAGAATGAAATGG
 AGCTCCAGAAGACGAAGAGAATTTGAAGAAGCCATCAAAAATGTGAACACAGCACTAAATACAACCTCAG
 ATCCCAAGCAGTATTGAAGATATATTAATGATGATCGATGCATAAATATCACCAACAGACACCAACTT
 TTTGGATTCTAGCTCGTGCCTTAAAGGAATTTGTGGCCAAGGAGGGTCAAGGAAATTTACCTGTCCGAGG
 CACAATCCTGATGATGATTGCAGATTCAACAAATACATAAACTGCAGAATGTTTACCGAGAGAAAAGCA
 AAGAAAGATGCTGCTGTAGGCAATCACGTTGCCAAATTGCTTCAGTCTGTTGGCCAGGCACAGAT
 CCATTTACAGAAAAGAATTAATAATGCTTTGCGCAATTCTGCATTTCTCGAGTGGTAAGATGTCGATC
 TTTAGCTGAAGAGTATGGCTTGGATACAGTCAACAAAGATGAAATTTATTCTAGCATGGACAATCCGGAT
 AATGAGATAGTCCTGTACCTGATGTTGCGGGCTGTTGATCGATTTATAAACAGCATGGCAGATACCCAG
 GAGTATCTAACTATCAAGTTGAAGAAGATATAGGGAAGTTGAAGTCTGTCTTACTGGCTTCCTTCAGGA
 ATATGGGCTGTCTGTAATGGTGAAGACGATTATGTCCATGAATTTTGGCCGTACGGAGCTGCTGAGCCA
 CACACCATTGCTGCGTTCCTGGGAGGAGCTGCTGCTCAAGAAGTTATCAAATAATCACCAACAATTCG
 TAATTTTAATAACTTATATTTATAGTGGTATGTCACAACTTCTGCAACTTCCAGTTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208551 representing NM_144931
 Red=Cloning site Green=Tags(s)

MAQPGKILKEQKYDRQLRLWGDHGQEALESABHVLINATATGTEILKNLVLPGIGSFTIIDGNLVSGEDA
 GNNFFLQKSSIGKNRAQAAMEFLQELNSDVSGSFVEESPENLLDNDPSFFCRFTIVVATQLLESTLLRLA
 DVLWNSQIPLLIICRTYGLVGYMRIIIEKHPVIESHPDNALEDLRDKPFPELREHLQSYDLDHMEKKDHS
 HTPWIVIIAKYLAQWYNETNGRIPKSYKEKEDFRDLIRQGILKNENGAPEDENFEEAIKNVNTALNTTQ
 IPSSIEDIFNDDRCINITKQPTFWILARALKEFVAKEGQGNLPVVRTIPDMIADSNKYIKLQNVYREKA
 KKDAAAVGNHVAKLLQSVQAPESISEKELKLLCSNSAFLRVVRCRSLAEEYGLDVTNKDEIISMDNPD
 NEIVLYLMLRAVDRFHKQHGRYPGVSNYQVEEDIGKLSCLTGFLQEYGLSVMVKDDYVHEFCRYGAAEP
 HTIAAFLGAAAQEVIKIITKQVIFNNTYIYSGMSQTSATFQL

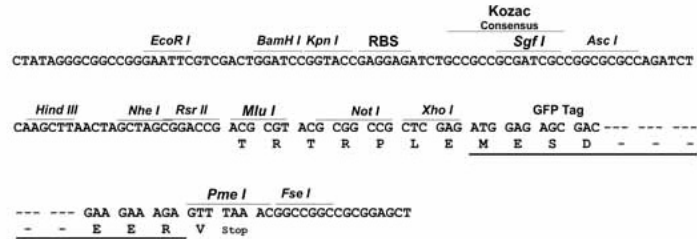
TRTRPLE – GFP Tag – V

Restriction Sites:

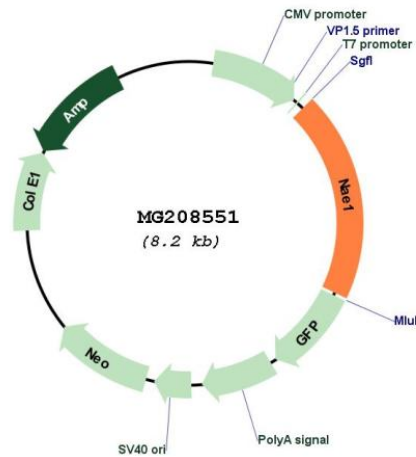
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:	NM_144931
ORF Size:	1602 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:	NM_144931.3
RefSeq Size:	1805 bp
RefSeq ORF:	1605 bp
Locus ID:	234664
UniProt ID:	Q8VBW6
Cytogenetics:	8 D3
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]