

Product datasheet for **MG212093**

Nes (NM_016701) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nes (NM_016701) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nes
Synonyms:	AA166324; C78523; ESTM46; Ifaprc2; Marc2; RC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG212093 representing NM_016701, codon optimized . Due to the complexity of NM_016701, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGAGGGCTGCGTAGGGGAGGAGACTTTCAAATGTGGGAGTTGAACAGAAGACTCGAGGCCTACCTGA
CCCGGGTGAAGACGCTTGAAGAGCAGAATCAGCTTCTGTCCGCAGAGCTCGGAGGACTGCGGGCCAGAG
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TGGAGGGAGAAGCAGCAGGCAGAACTCCAGCGGATAACCTGGCCGAAGAAGTGGAGTCAGTAGCCGGAA
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 GGAATTCCTCCAGGAACAGGGTACACTGAAGGCCCACTGGTGGGTTCCCGGTTACCTTGGCCCTT
 CCCAGCCACTCAAGTTCACACTGTCCGGGTAGATGGAGATTCTTGAGTTCTGGCGAAGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG212093 representing NM_016701
 Red=Cloning site Green=Tags(s)

MEGCVGEESFQMWELNRRLEAYL TRVKTL EEQNQLL SAELGGLRAQSGDASWRARADDELAALRVLVDQR
 WREKHEAEVQRDNLAELESVAGRCQVRLARERTIEEAACSRRALEAEKNARGWLSTQAAELERELEAL
 RASHEEERAHLNAQAACTPRRPPAPAHASPIRAPEVEELARRLGEVWRGAVRDYQERVAHMESSLGQARE
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 VPGKLLLEPCSPILPILTAHELQPQAEIQEAGWQPEAGTEALGRVEDEPEFGRGEIPEGLQDWEEGRED
 SEADELGETLPDSTPLGLYLKSPASPKWEQAGEQRLFPQGEARKEGWSPAALAAQGLSDPPEEEQQGHDS
 DLSSEEFEDLGTASLLPGVPKEVSDHLGQEPVLPQACWDQGGESDGFADSEESGEEGEEEDADEEEGA
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TRTRPLE – GFP Tag – V

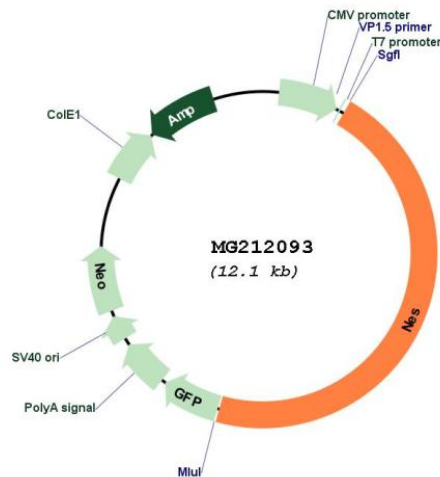
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN:

NM_016701

ORF Size:

5592 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:	<u>NM_016701.3</u> , <u>NP_057910.3</u>
RefSeq Size:	6143 bp
RefSeq ORF:	5595 bp
Locus ID:	18008
UniProt ID:	<u>Q6P5H2</u>
Cytogenetics:	3 38.78 cM
Gene Summary:	Required for brain and eye development. Promotes the disassembly of phosphorylated vimentin intermediate filaments (IF) during mitosis and may play a role in the trafficking and distribution of IF proteins and other cellular factors to daughter cells during progenitor cell division (By similarity). Required for survival, renewal and mitogen-stimulated proliferation of neural progenitor cells.[UniProtKB/Swiss-Prot Function]