

Product datasheet for **MG219437**

Nos1ap (NM_001109985) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nos1ap (NM_001109985) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nos1ap
Synonyms:	6330408P19Rik; Capon
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG219437 representing NM_001109985
 Red=Cloning site Blue=ORF Green=Tags(s)
 TTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCAGCAAACCAAGTACAACCTTGTGGACGATGGGCACGATCTACGGATCCCTTTGCACAACGAGG
 ACGCCTTCCAGCACGGCATCTCTTTGAGGCCAAGTACGTGGGAAGCCTGGATGTGCCAGACCCAACAG
 CAGGGTTGAGATCGTGGCTGCCATGCGCAGAATCCGGTATGAGTTTAAAGCCAAGAACATCAAGAAGAAG
 AAAGTAAGCATCATGGTCTCTGTGGACGGTGTCAAGGTGATTCTGAAGAAGAAGAAAAAGAAAGGAGT
 GGACGTGGGATGAGAGCAAGATGCTGGTGTGACAGGACCTATCTACAGGATCTTCTATGTCTCTCATGA
 CTCCCAAGACTTGAAAATCTTCAGCTATATTGCCAGAGATGGTCCAGCAATATCTTCAGATGTAACGTC
 TTTAAATCCAAAAGAAGAGTCAAGCTATGAGAATCGTGGACAGTGGGACAGGCCCTTCGAAGTCTGCC
 ACAAGCTGAGCCTGCAGCACACACAGCAGAATGCAGATGGCCAGGAAGATGGGGAGAGCGAGAGGAACAG
 TGATGGCTCAGGAGACCCAGGCCGCGAGCTCACGGGAGCTGAGAGGGTCTCCACAGCCGCTGCAGAGGAG
 ACAGACATTGACGCCGTGGAGGTCCCACTCCCTGGGAATGACATTCTGGAATTCAGCCGAGGTGTGACTG
 ATCTGGATGCCGTAGGAAGGATGGAGGCTCCACATAGACTCAACGGTCTCACCCACCCTCAGGAGCC
 CATGCTGACAGCCTCCCCTCGAATGCTGCTCCCTTCTTCTTCTCGAAGCCGCCAGGCTTGGGCACGGGG
 ACGCCCTGTCCACTCACCACCAGATGCAGCTCCTCCAGCAGCTCCTCCAGCAGCAGCAACAACAGACAC
 AAGTGGCTGTGGCCAGGTACACTTACTGAAGGATCAGTTGGTGTCTGAGGCTGCGGCGCGGCTGGAGGC
 CCAGGCACGAGTGCACCAGCTCCTGTGCGAACAAGACATGCTCCAGCACATCTCTGCTGGTCAAG
 CAGGTGCAGGAGCTGGAGCTGAAGCTGTGAGACAGAACCATTGGCTCCAGGACAGCTTGTCTGGAGA
 TCACCTTCCGTTCAAGTGCCCTGCCTGTGCTGTGTAATCCACCACCCCTAAGCCAGAGGACCTACACTC
 ACCACTGCTGGGCGCTGGCTTGGCTGACTTTGCCACCCAGCGGGCAGCCCTTTAGGTAGGCATGACTGC
 TTGGTGAAGCTGGAGTGTCTTTCGCTTCTCCACCTGAGGATACCCAGCCGATGATGGCAGAGGTTGAGC
 CGCTCCTAGTGGCTGGAGCTCATCAAGTTCGAGAGTCGGGCATCGCCTCTGAGTATGAGTCCAACAC
 AGACGAAAGCGAGGAGCGTGACTCATGGTACAGGAAGAGCTGCCACGCCTGCTCAATGTCTTACAGCGG
 CAGGAGTTGGGTGACAGTTGGATGATGAGATCGCCGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG219437 representing NM_001109985
 Red=Cloning site Green=Tags(s)
 MPSKTKYNLVDDGHDRLIPLHNEDAFQHGISFEAKYVGS LDVPRPNSRVEIVAAMRRIRYEFKAKNIKKK
 KVSIMVSDGVKILK KKKKKKEWTWDESKMLVMQDPIYRIFYVSHDSQDLKIFSYIARDGASNIFRCNV
 FKSKKKSQAMRIVRTVQAFEVCHKLSLQHTQQNADQEDGSESRNSDGS GPDGRQLTGAERVSTAAEE
 TDIDAVEVPLPGNDILEFSRGVTDLDAVGKDGGSHIDSTVSPHPQEPMLTASPRMLLPSSSKPPGLGTG
 TPLSTHHQMQLLQQLLQQQQQTQVAVAVHLLKDLQAAEAAAARLEAQRVHQLLLQNKDMLQHISLLVK
 QVQELELKL SGQNTMGSQDSLLEITFRSGALPVLCESTTPKPEDLHSPLLGAGLADF AHPAGSPLGRHDC
 LVKLECFRFLPPEDTQPMMAQGEPLLGLELIKFRESGIASEYESNTDESEERDSWSQEELPRLNLVLR
 QELGDSL DDEIAV

TRTRPLE - GFP Tag - V

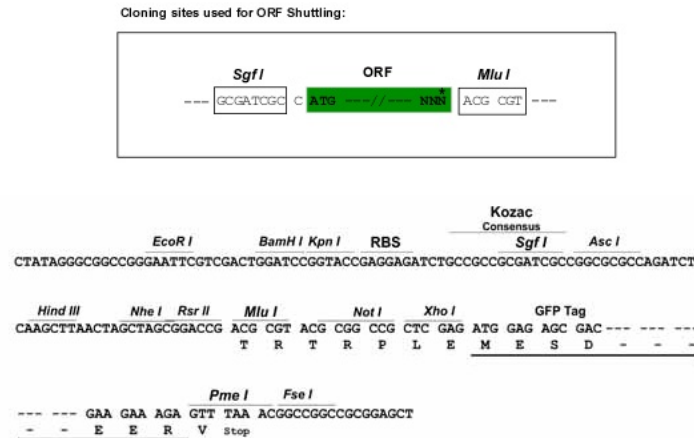
Chromatograms:

https://cdn.origene.com/chromatograms/ja2312_f05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001109985

ORF Size: 1509 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 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.

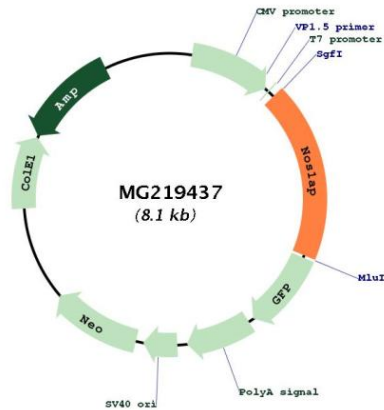
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001109985.2](#)
 RefSeq Size: 2973 bp
 RefSeq ORF: 1512 bp
 Locus ID: 70729
 UniProt ID: [Q9D3A8](#)
 Cytogenetics: 1 H3

Gene Summary: Adapter protein involved in neuronal nitric-oxide (NO) synthesis regulation via its association with nNOS/NOS1. The complex formed with NOS1 and synapsins is necessary for specific NO and synapsin functions at a presynaptic level. Mediates an indirect interaction between NOS1 and RASD1 leading to enhance the ability of NOS1 to activate RASD1. Competes with DLG4 for interaction with NOS1, possibly affecting NOS1 activity by regulating the interaction between NOS1 and DLG4 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG219437