

## Product datasheet for **MG219444**

### Nos1ap (NM\_027528) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nos1ap (NM_027528) 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)
ORF Nucleotide Sequence:	>MG219444 representing NM_027528 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGCAGAATCCGGTATGAGTTTAAAGCCAAGAACATCAAGAAGAAGAAAGTAAGCATCATGGTCTCTG  
TGGACGGTGTCAAGGTGATTCTGAAGAAGAAGAAAAGAAAAGGAGTGGACGTGGGATGAGAGCAAGAT  
GCTGGTATGCAGGACCCTATCTACAGGATCTTCTATGTCTCTCATGACTCCCAAGACTTGAAAATCTTC  
AGCTATATTGCCAGAGATGGTGCCAGCAATATCTTCAGATGTAACGTCTTAAATCCAAAAGAAGAGTC  
AAGCTATGAGAATCGTGCGGACAGTGGGACAGGCCTTCGAAGTCTGCCACAAGCTGAGCCTGCAGCACAC  
ACAGCAGAATGCAGATGGCCAGGAAGATGGGGAGAGCGAGAGGAACAGTGATGGCTCAGGAGACCCAGGC  
CGGCAGCTCACGGGAGCTGAGAGGGTCTCCACAGCCGCTGCAGAGGAGACAGACATTGACCCGTGGAGG  
TCCCACTCCCTGGGAATGACATTCTGGAATTCAGCCGAGGTGTGACTGATCTGGATGCCGTAGGGAAGGA  
TGGAGGCTCCACATAGACTCAACGGTCTACCCACCCCTCAGGAGCCCATGCTGACAGCCTCCCTCGA  
ATGCTGCTCCCTTCTCTTCTCGAAGCCGCCAGGCTTGGGCACGGGACGCCCTGTCCACTCACCACC  
AGATGCAGCTCCTCCAGCAGCTCCTCCAGCAGCAGCAACAACAGACACAAGTGGCTGTGGCCAGGTTCT  
CCTCAGCCTCCTCCCTTCTTACAGGCTCCACTCTCATGGCT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG219444 representing NM\_027528  
 Red=Cloning site Green=Tags(s)

MRRIRYEFKAKNIKKKKVIMVSDGVKVLKKKKKKKEWTWDESKMLVMQDPIYRIFYVSHDSQDLKIF  
 SYIARDGASNIFRCNVFKSKKKSQAMRIVRTVGQAFEVCHKLSLQHTQQNADGQEDGESERNSDGSGDGP  
 RQLTGAERVSTAAAEETDIDAVEVPLPGNDILEFSRGVTDLDVAGKDGGSIDSTVSPHPQEPMLTASPR  
 MLLPSSSSKPPGLGTGTPLSTHHQMQLLQQLLQQQQQTQVAVAVLLSLLPSSQAPLSWA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_027528

**ORF Size:** 813 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\\_027528.2](#), [NP\\_081804.1](#)

**RefSeq Size:** 1533 bp

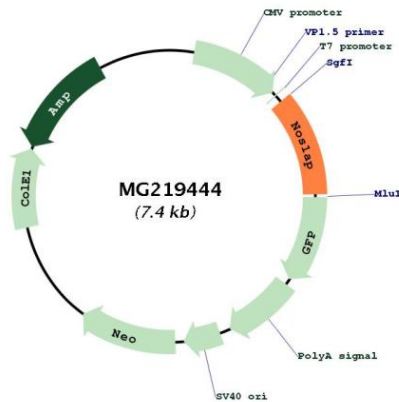
**RefSeq ORF:** 816 bp

**Locus ID:** 70729

**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 MG219444