

Product datasheet for **MG201076**

Ngb (NM_022414) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ngb (NM_022414) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Ngb
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201076 representing NM_022414
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCGCCCGGAGTCAGAGCTGATCCGGCAGAGCTGGCGGGTAGTGAGCCGACGCCCTCTGGAACATG
 GCACTGTCCTGTTCGCCAGGCTCTTCGCCCTGGAACCCAGCCTGCTGCCTCTCTCCAGTACAATGGCCG
 CCAGTTCTCCAGCCCTGAGGACTGTCTCTCTCTCCAGAATTCCTGGACCACATTAGGAAGGTGATGCTA
 GTGATTGATGCTGCAGTGACCAACGTGGAGGACCTGTCTTCATTGGAGGAGTACCTGACCAGCTTGGGCA
 GGAAGCATCGGGCAGTGGGAGTGAGGCTCAGCTCCTTCTCGACAGTAGGCGAGTCCCTGCTACATGCT
 GGAGAAGTGCCTGGGTCCCGACTTTACACCAGCTACAAGGACCGCTGGAGCCGACTCTACGGAGCTGTG
 GTGCAAGCCATGAGCCGAGGCTGGGATGGGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201076 representing NM_022414
 Red=Cloning site Green=Tags(s)

MERPESELIRQSWRVVSRSPLEHGTVLFARLFALPESLLPLFQYNGRQFSSPEDCLSSPEFLDHIRKVML
 VIDAAVTNVEDLSSLEEYLTSLGRKHRVGVRLSSFSTVGESLLYMLEKCLGPDFTPATRTAWSRLYGAV
 VQAMSRGWDGE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:



ACCN: NM_022414

ORF Size: 453 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_022414.2](#), [NP_071859.1](#)

RefSeq Size: 1630 bp

RefSeq ORF: 456 bp

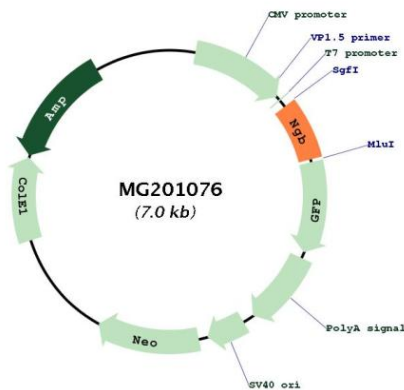
Locus ID: 64242

UniProt ID: [Q9ER97](#)

Cytogenetics: 12 D2

Gene Summary: Involved in oxygen transport in the brain. Hexacoordinate globin, displaying competitive binding of oxygen or the distal His residue to the iron atom. Not capable of penetrating cell membranes. The deoxygenated form exhibits nitrite reductase activity inhibiting cellular respiration via NO-binding to cytochrome c oxidase. Involved in neuroprotection during oxidative stress. May exert its anti-apoptotic activity by acting to reset the trigger level of mitochondrial cytochrome c release necessary to commit the cells to apoptosis.
[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG201076