

Product datasheet for **RC207482**

Neuroglobin (NGB) (NM_021257) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Neuroglobin (NGB) (NM_021257) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Neuroglobin
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC207482 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCGCCCGGAGCCCGAGCTGATCCGGCAGAGCTGGCGGGCAGTGAGCCGAGCCCGCTGGAGCAGC
GCACCGTCCTGTTTGCCAGGCTGTTTGCCTGGAGCCTGACCTGCTGCCCTCTTCCAGTACAACCTGCCG
CCAGTTCTCCAGCCAGAGGACTGTCTCTCCTCGCCTGAGTTCCTGGACCACATCAGGAAGGTGATGCTC
GTGATTGATGCTGCAGTGACCAATGTGGAAGACCTGTCTCACTGGAGGAGTACCTTGCCAGCCTGGGCA
GGAAGCACCGGGCAGTGGGTGTGAAGCTCAGCTCCTTCTCGACAGTGGGTGAGTCTGCTCTACATGCT
GGAGAAGTGTCTGGGCCCTGCCTTCACACCAGCCACACGGGCTGCCTGGAGCCAACCTCTACGGGGCCGTA
GTGCAGGCCATGAGTCGAGGCTGGGATGGCGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207482 protein sequence
Red=Cloning site Green=Tags(s)

MERPEPELIRQSWRAVSRSPLEHGTVLFARLFALEPDLLPLFQYNCRQFSSPEDCLSSPEFLDHIRKVML
VIDAAVTNVEDLSSLEEYLASLGRKHRAVGVKLSSTVGVESLLYMLEKCLGPAFTPATRAAWSQLYGA
VQAMSRGWDGE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6019_b03.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_021257

ORF Size: 453 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_021257.3](#), [NP_067080.1](#)

RefSeq Size: 1885 bp

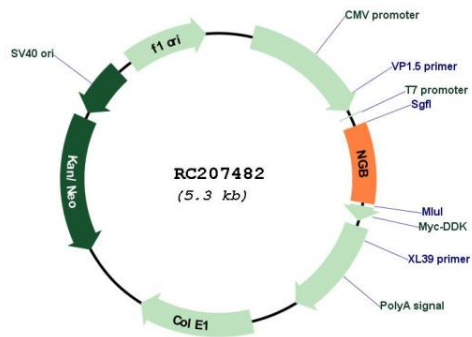
RefSeq ORF: 456 bp

Locus ID: 58157

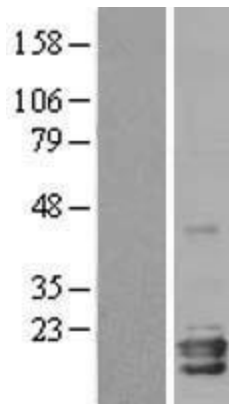
UniProt ID: [Q9NPG2](#)
 Cytogenetics: 14q24.3
 MW: 16.9 kDa
 Gene Summary:

This gene encodes an oxygen-binding protein that is distantly related to members of the globin gene family. It is highly conserved among other vertebrates. It is expressed in the central and peripheral nervous system where it may be involved in increasing oxygen availability and providing protection under hypoxic/ischemic conditions. [provided by RefSeq, Jul 2008]

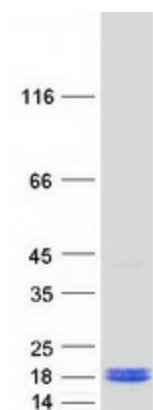
Product images:



Circular map for RC207482



Western blot validation of overexpression lysate (Cat# [LY402862]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207482 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NGB protein (Cat# [TP307482]). The protein was produced from HEK293T cells transfected with NGB cDNA clone (Cat# RC207482) using MegaTran 2.0 (Cat# [TT210002]).