

## Product datasheet for **MR228174**

### **Ngb (NM\_001294308) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ngb (NM\_001294308) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Ngb  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR228174 representing NM\_001294308  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCGCCCGGAGTCAGAGCTGATCCGGCAGAGCTGGCGGGTAGTGAGCCGCAGCCCTCTGGAACATG  
GCACTGTCCTGTCGCCAGGCTCTTCGCCCTGGAACCCAGCCTGCTGCCTCTCTCCAGTACAATGGCCG  
CCAGTTCTCCAGCCCTGAGGACTGTCTCCTCTCCAGAATTCCTGGACCACATTAGGAAGGTGATGCTA  
GTGATTGATGCTGCAGTGACCAACGTGGAGGACCTGTCTTCATTGGAGGAGTACCTGACCAGCTTGGGCA  
GGAAGCATCGGGCAGTGGGAGTGAGGCTCAGCTCCTTCTCGGTGGGTAGTGGGACAGTAGCCGAGTCCCT  
GCTCTACATGCTGGAGAAGTGCCTGGGTCCCGACTTTACACCAGCTACAAGGACCGCCTGGAGCCGACTC  
TACGGAGCTGTGGTGCAAGCCATGAGCCGAGGCTGGGATGGGGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR228174 representing NM\_001294308  
**Red=Cloning site Green=Tags(s)**

MERPESELIRQSWRVVSRSPLEHGTVLFARLFALEPSLLPLFQYNGRQFSSPEDCLSSPEFLDHIRKVML  
VIDAAVTNVEDLSSLEEYLTSLGRKHRAVGVRLSSFVSGSGTVGESLLYMLEKCLGPDFTPATRTAWSRL  
YGAVVQAMSRGWDGE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

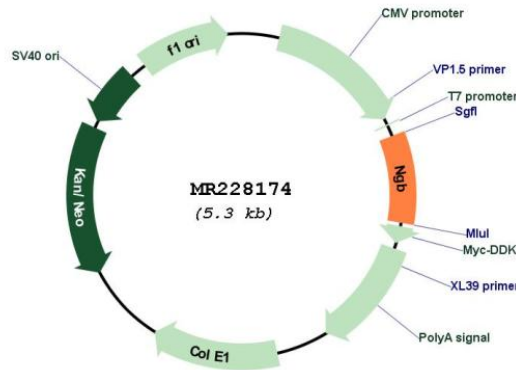


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_001294308

ORF Size: 465 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001294308.1, NP_001281237.1</u>
<b>RefSeq Size:</b>	1644 bp
<b>RefSeq ORF:</b>	468 bp
<b>Locus ID:</b>	64242
<b>Cytogenetics:</b>	12 D2
<b>MW:</b>	17.8 kDa
<b>Gene Summary:</b>	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]