

Product datasheet for RC206642

Cytoglobin (CYGB) (NM_134268) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cytoglobin (CYGB) (NM_134268) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Cytoglobin
Synonyms: HGB; STAP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC206642 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGGAGAAAGTGCCAGGCGAGATGGAGATCGAGCGCAGGGAGCGGAGCGAGGAGCTGTCCGAGGCGGAGA
 GGAAGGCGGTGCAGGCTATGTGGCCCCGGCTCTATGCCAGCTGCGAGGACGTGGGGTGGCCATCCTGGT
 GAGTTCTTTGTGAAGTCCCTCGGCCAAGCAGTACTTCAGCCAGTTCAAGCACATGGAGGATCCCCTG
 GAGATGGAGCGGAGCCCCAGCTGCGGAAGCACGCTGCCGAGTCATGGGGGCCCTCAACTGTCTGG
 AGAACCTGCATGACCCCGACAAGGTGTCCTCTGTGCTCGCCCTTGTGGGAAAGCCACGCCCTCAAGCA
 CAAGGTGGAACCGGTGACTTCAAGATCCTCTCTGGGGTCAATTCTGGAGGTGGTCGCCGAGGAATTTGCC
 AGTGACTTCCACCTGAGACGCAGAGAGCTGGGCCAAGCTGCGTGGCCTCATCTACAGCCACGTGACCG
 CTGCCTACAAGGAAGTGGGTGGGTGCAGCAGGTCCCCAACGCCACCACCCACCGGCCACACTGCCCTC
 TTCGGGGCCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206642 protein sequence
 Red=Cloning site Green=Tags(s)

MEKVPGEMEIERERSEELSEAERKAVQAMWARLYASCEDVGVAILVRRFFVNFPSAKQYFSQFKHMEDPL
 EMERSPQLRKHACRVMGALNTVVENLHDPDKVSSVLALVGKAHALKHKVEPVYFKILSGVILEVVAEEFA
 SDFPPETQRAWAKLRGLIYSHVTAAYKEVGWVQQVPNATTPPATLPSSGP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

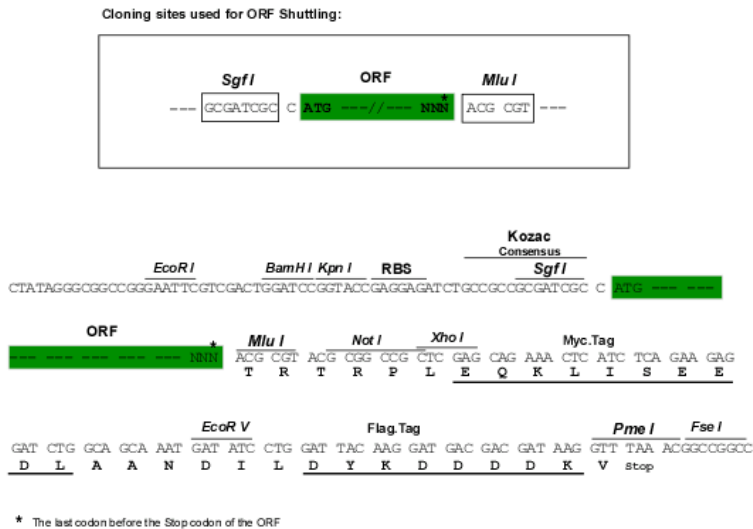


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Chromatograms: https://cdn.origene.com/chromatograms/mk6287_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_134268

ORF Size: 570 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.

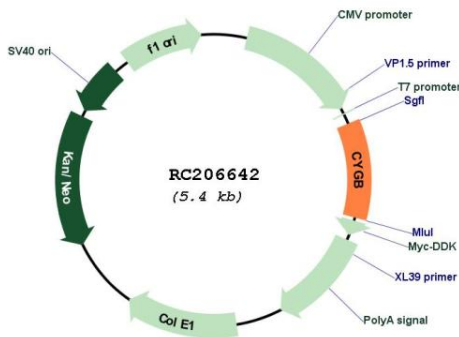
RefSeq: [NM_134268.5](#)

RefSeq Size: 2166 bp

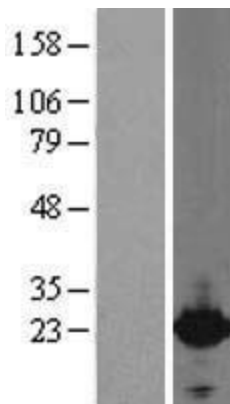
RefSeq ORF: 573 bp
 Locus ID: 114757
 UniProt ID: [Q8WWM9](#)
 Cytogenetics: 17q25.1
 Domains: globin
 MW: 21.4 kDa

Gene Summary: This gene encodes a globin protein found in vertebrate cells. The encoded protein is described as a hexacoordinate hemoglobin which binds ligand differently from the pentacoordinate hemoglobins involved in oxygen transport, and may be involved in protection during oxidative stress. This gene is located on chromosome 17 in the same region as a retinal gene which is mutated in progressive rod-cone degeneration, but in the opposite orientation. [provided by RefSeq, Jan 2012]

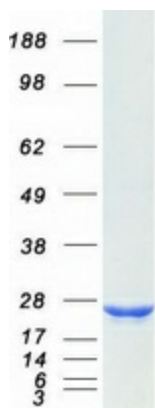
Product images:



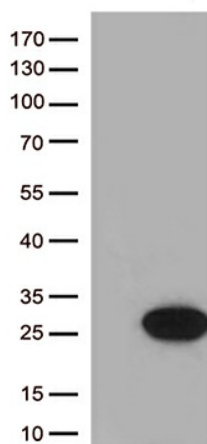
Circular map for RC206642



Western blot validation of overexpression lysate (Cat# [LY408741]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206642 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYGB protein (Cat# [TP306642]). The protein was produced from HEK293T cells transfected with CYGB cDNA clone (Cat# RC206642) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CYGB (Cat# RC206642, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CYGB (Cat# [TA812911])(1:500).