

Product datasheet for RC200706

CYBA (NM_000101) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CYBA (NM_000101) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: CYBA
Synonyms: CGD4; p22-PHOX
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC200706 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGCAGATCGAGTGGGCCATGTGGGCCAACGAGCAGGCGCTGGCGTCCGGCCTGATCCTCATACCCG
 GGGGCATCGTGGCCACAGCTGGGCGTTACCCAGTGGTACTTTGGTGCCTACTCCATTGTGGCGGGCGT
 GTTTGTGTGCCTGCTGGAGTACCCCGGGGAAGAGGAAGAAGGGCTCCACCATGGAGCGCTGGGGACAG
 AAGTACATGACCGCCGTGGTGAAGCTGTTCGGGCCCTTACCAGGAATTACTATGTTCCGGCCGCTCTGC
 ATCTCCTGCTCTCGGTGCCCGCCGGCTTCTGCTGGCCACCATCCTTGGGACCGCCTGCCTGGCCATTGC
 GAGCGGCATCTACCTACTGGCGGCTGTGCGTGGCGAGCAGTGGACGCCCATCGAGCCCAAGCCCCGGGAG
 CGGCCGAGATCGGAGGCACCATCAAGCAGCCGCCAGCAACCCCCCGCCGGGCCCCCGCCGAGGCC
 GCAAGAAGCCAGCGAGGAGGAGGCTGCGCGCGCGGGGGGACCCCCGGGAGGTCCCCAGGTCAACCC
 CATCCCGGTGACCGACGAGGTCGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200706 protein sequence
 Red=Cloning site Green=Tags(s)

MGQIEWAMWANEQALASGLILITGGIVATAGRFTQWYFGAYSIVAGVFCVCLLEYPRGKRKKGSTMERWGO
 KYMTAVVKLFGPFTRNYYVRAVLHLLSVPAGFLLATILGTACLAIASGIYLLAAVRGEQWPIEPKPRE
 RPQIGGTIKQPPSNPPRPPAEARKKPSEEEAAAAAGPPGGPQVNPPIPVTDEVV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6075_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000101

ORF Size: 585 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_000101.4](#)

RefSeq Size: 778 bp

RefSeq ORF: 588 bp

Locus ID: 1535

UniProt ID: [P13498](#)

Cytogenetics: 16q24.2

Domains: cytochr_b558a

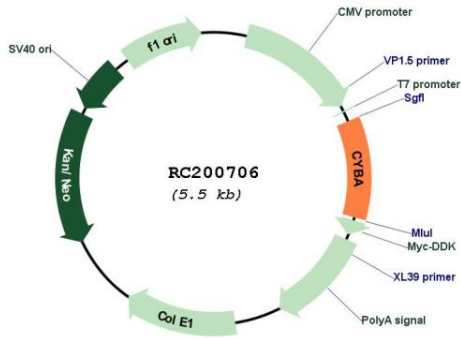
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Leukocyte transendothelial migration

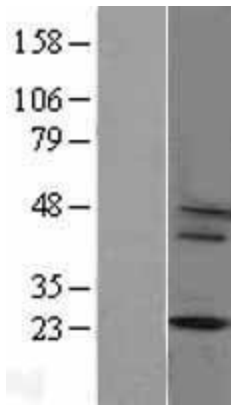
MW: 21 kDa

Gene Summary: Cytochrome b is comprised of a light chain (alpha) and a heavy chain (beta). This gene encodes the light, alpha subunit which has been proposed as a primary component of the microbicidal oxidase system of phagocytes. Mutations in this gene are associated with autosomal recessive chronic granulomatous disease (CGD), that is characterized by the failure of activated phagocytes to generate superoxide, which is important for the microbicidal activity of these cells. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC200706



Western blot validation of overexpression lysate (Cat# [LY400029]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200706 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).