

Product datasheet for **MR208975**

Cybb (NM_007807) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cybb (NM_007807) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cybb
Synonyms:	C88302; Cgd; CGD91-phox; Cyd; gp91-1; gp91
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208975 representing NM_007807
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGAACTGGGCTGTGAATGAAGGACTCTCCATCTTTGTCATTCTGGTGTGGTTGGGGCTGAATGTCT
 TCCTCTTTATCAACTACTACAAGGTTTATGATGATGGCCCTAAGTATAATTATACTCGAAAACTCCTTGG
 GTCAGCACTGGCTCTGGCCCGGCACCTGCAGCCTGCCTGAATTTCAACTGTATGCTGATCCTGCTGCCA
 GTGTGTCGAAATCTGCTCTCCTTTCTCAGGGGTTCCAGTGCCTGTTGCTCGACAAGGATTCGAAGACAAC
 TGGACAGGAACCTCACTTTCCATAAGATGGTAGCTTGGATGATAGCACTGCACACCGCCATCCACACAAT
 TGCACATCTCTTCAACGTTGAGTGGTGTGAATGCCAGAGTCGGGATTTCTGACCGGTATTCAATAGCT
 CTCTCTGACATCGGTGACAATGAGAACGAAGTATCTCAATTTTCTAGAGAAAAATCAAGAACCCTG
 AAGGGGGCTGTATGTGGCCGTGACTCGGTTGGCTGGGATCACAGGAATTGTCATCACACTGTGTCTCAT
 ATTGATTACACATCCTCTACAAAACCATTTCGGAGGCTTATTTTGAAGTGTCTGGTATACACACCAT
 CTCTTTGTGATCTTCTCATCGGCCTTGCCATCCATGGAGCTGAACGAATTGTACGTGGACAGACTGCGG
 AGAGTTTGAAGAGCATAATTTAGATATCTGTGCAGACAAAATCGAAGAATGGGGAAAAATAAAGGAGTG
 CCCAGTACCAAAGTTCGCTGAAACCCTCCTATGACTTGGAAATGGATAGTGGGCTCCTATGTTTCTGTAC
 CTTTGTGAGAGGTTGGTTCGGTTTTGGCGATCTCAGCAAAGGTGGTTCATACCAAGGTGGTCAACCACC
 CTTTCAAACCATTGAGCTTCAGATGAAGAAGAAGGGATTCAAGATGGAGGTGGGACAGTACATTTTTGT
 CAAGTGCCCAAGGTATCCAAGTTAGATGGCACCCATTCACACTGACCTCTGCTCCTGAGGAAGACTTT
 TTAGCATCCATATCCGTATTGTGGGAGACTGGACGGAGGGCTATTCAATGCTTGTGGCTGTGATAAGC
 AGGATTTCCAAGATGCCTGAAACTACCTAAGATAGCAGTTGATGGACCTTTGGTACAGCCAGTGAAGA
 GTGTGTTCAAGTATGAGGTGGTGTGTTAGTGGGAGCCGGATTGGAGTCACGCCCTTTGCCCTCATTCTC
 AAGTCTGTCTGGTACAAATATTGTGATAATGCCACCAGTCTGAAACTCAAAAAGTCTACTTCTACTGGC
 TGTGCAGGGACACGCATGCCTTTGAGTGGTTTGCAGACCTGCTGCAGCTGCTGGAGACCCAGATGCAGGA
 AAGGAACAATGCCAACTCCTCAGCTACAATATCTACCTACTGGCTGGGATGAATCTCAGGCCAATCAC
 TTTGCTGTGCACCATGATGAGGAGAAAGATGTGATCACAGGCCTAAAACAGAAGACTCTGTATGGACGGC
 CCAACTGGGATAACGAGTTCAAGACCATTGCAAGTGAACACCCTAACACCACAATAGGCGTTTTCTGTG
 TGGCCCTGAAGCCTTGGCTGAAACTCTCAGTAAACAGAGCATCTCCAACCTCAGAATCCGGCCCGCTGGA
 GTCCACTTCATTTCAACAAGGAAAACCTC

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208975 representing NM_007807
 Red=Cloning site Green=Tags(s)

MGNWAVNEGLSIFVILVWLG LNVFLFINYYKVYDDGPKYNYTRKLLGSALALARAPAACLNFNCMLILLP
 VCRNLLSFLRGSSACCSTRIRRLDRNLTFHKMVAWMIALHTAHTIAHLFNVEWCVNARVGISDRYSIA
 LSDIGDNENEYLNFAREKIKNPEGGLYVAVTRLAGITGIVITLCLILIIITSSTKIRRYSYFEVFWYTHH
 LFVIFFIGLAIHGAERIVRGQTAELEEHLNLDICADKIEEWGKIKECPVPKFAGNPPMTWKWIVGPMFLY
 LCERLVRFWRSQQKVVIKVVTHPFKTIELQMKKGFKMEVGQYIFVKCPKVSLEWHPF TLTSAPPEEDF
 FSIHIRIVGDWTEGLFNACGCDKQEFQDAWKLPKIAVDGPFGTASEDVF SYEVVMLVGAGIGVTPFASIL
 KSVWYKYCDNATSLKLLKIYFYWLCRDTHAFEFWADLLQLLETQMQRNANFLSYNIYLTGWDESQANH
 FAVHHDEEKDVI TGLKQKTLYGRPNWDNEFKTIASEHPNTTIGVFLCGPEALAE TLSKQSI SNSESGPRG
 VHFIFNKENF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9015_b02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_007807

ORF Size: 1710 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.

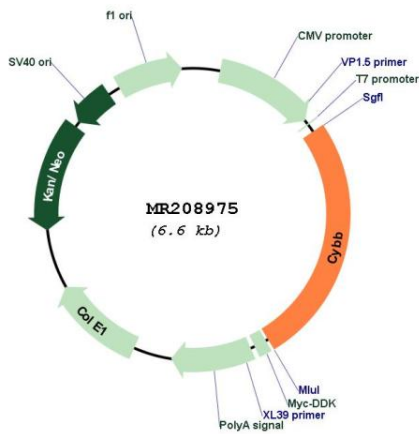
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_007807.5, NP_031833.3](#)
 RefSeq Size: 4750 bp
 RefSeq ORF: 1713 bp
 Locus ID: 13058
 UniProt ID: [Q61093](#)
 Cytogenetics: X A1.1
 MW: 65.8 kDa

Gene Summary: This gene encodes the heavy chain component of a heterodimeric transmembrane ion transporter composed of both a heavy and a light chain. This transporter mediates the transfer of electrons from nicotinamide adenine dinucleotide phosphate (NADPH) to oxygen to generate superoxide. This reaction is important in the innate immune response to pathogens. However, increased activity of the encoded protein also leads to the generation of reactive oxygen species that result in oxidative stress and can cause tissue damage. Conversely, loss of function of the related gene in human causes chronic granulomatous disease. Alternative splicing results in multiple transcript variants, although the full-length nature of some of these variants has not been determined. [provided by RefSeq, May 2013]

Product images:



Circular map for MR208975