

Product datasheet for RC207544L2

OriGene Technologies, Inc.

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CYBB (NM_000397) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CYBB (NM_000397) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: CYBB

Synonyms: AMCBX2; CGD; CGDX; GP91-1; GP91-PHOX; GP91PHOX; IMD34; NOX2; p91-PHOX

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

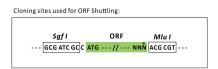
E. coli Selection: Chloramphenicol (34 ug/mL)

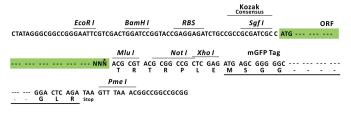
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC207544).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



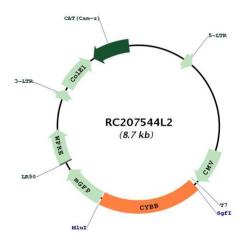


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_000397 **ORF Size:** 1710 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.

RefSeq: <u>NM 000397.2</u>

RefSeq Size: 4353 bp **RefSeq ORF:** 1713 bp



CYBB (NM_000397) Human Tagged Lenti ORF Clone - RC207544L2

Locus ID: 1536

UniProt ID: P04839

Cytogenetics: Xp21.1-p11.4

Domains: Ferric_reduct

Protein Families: Druggable Genome, Ion Channels: Other, Transmembrane

Protein Pathways: Leukocyte transendothelial migration

MW: 65.3 kDa

Gene Summary: Cytochrome b (-245) is composed of cytochrome b alpha (CYBA) and beta (CYBB) chain. It has

been proposed as a primary component of the microbicidal oxidase system of phagocytes. CYBB deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD). In this disorder, there is decreased activity of phagocyte NADPH oxidase; neutrophils are able to phagocytize bacteria but cannot kill them in the phagocytic vacuoles. The cause of the killing defect is an inability to increase the cell's respiration and consequent failure to deliver activated oxygen into the phagocytic vacuole.

[provided by RefSeq, Jul 2008]