

## **Product datasheet for RC217552L1**

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OriGene Technologies, Inc.

### CYB5R3 (NM\_007326) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: CYB5R3 (NM\_007326) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CYB5R3

Synonyms: B5R; DIA1

Selection:

**Mammalian Cell** 

**Vector:** pLenti-C-Myc-DDK (PS100064)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC217552).

None

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

**ACCN:** NM\_007326

ORF Size: 834 bp



#### CYB5R3 (NM\_007326) Human Tagged Lenti ORF Clone - RC217552L1

**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 007326.2</u>, <u>NP 015565.1</u>

RefSeq Size: 2000 bp
RefSeq ORF: 837 bp
Locus ID: 1727
UniProt ID: P00387

Cytogenetics: 22q13.2

**Protein Families:** Druggable Genome

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism

MW: 31.4 kDa

**Gene Summary:** This gene encodes cytochrome b5 reductase, which includes a membrane-bound form in

somatic cells (anchored in the endoplasmic reticulum, mitochondrial and other membranes) and a soluble form in erythrocytes. The membrane-bound form exists mainly on the

cytoplasmic side of the endoplasmic reticulum and functions in desaturation and elongation of fatty acids, in cholesterol biosynthesis, and in drug metabolism. The erythrocyte form is

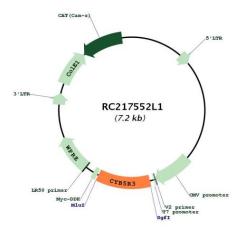
located in a soluble fraction of circulating erythrocytes and is involved in methemoglobin

reduction. The membrane-bound form has both membrane-binding and catalytic domains, while the soluble form has only the catalytic domain. Alternate splicing results in multiple transcript variants. Mutations in this gene cause methemoglobinemias. [provided by RefSeq,

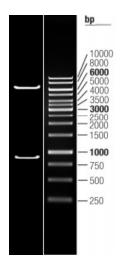
Jan 2010]



# **Product images:**



Circular map for RC217552L1



Double digestion of RC217552L1 using Sgfl and Mlul