

## Product datasheet for KN207544RB

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### **CYBB Human Gene Knockout Kit (CRISPR)**

#### **Product data:**

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA:RFP-BSDSymbol:CYBBLocus ID:1536

**Components: KN207544G1**, CYBB gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN207544G2, CYBB gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN207544RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

**Disclaimer:** These products are manufactured and supplied by OriGene under license from ERS. The kit is

designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

 RefSeq:
 NM 000397

 UniProt ID:
 P04839

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

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.

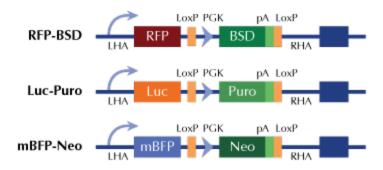
[provided by RefSeg, Jul 2008]





# **Product images:**

#### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter