

## Product datasheet for **KN207544**

### CYBB Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	CYBB
Locus ID:	1536
Components:	<p><b>KN207544G1</b>, CYBB gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTGACTTCTCGGGGTTATCT</p> <p><b>KN207544G2</b>, CYBB gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGGAAGTGGGCTGTGAATGA</p> <p><b>KN207544D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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 AGCTCCGGTT CCAACGATC

**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 RefSeq, Jul 2008]

Product images:

