

Product datasheet for KN209835RB

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YB1 (YBX1) 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-BSD

Symbol: YB1

Locus ID: 4904

Components: KN209835G1, YB1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN209835G2, YB1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN209835RBD, 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: <u>NM 004559</u>, <u>NR 132737</u>

UniProt ID: P67809

Synonyms: BP-8; CSDA2; CSDB; DBPB; MDR-NF1; NSEP-1; NSEP1; YB-1; YB1

Summary: This gene encodes a highly conserved cold shock domain protein that has broad nucleic acid

binding properties. The encoded protein functions as both a DNA and RNA binding protein and has been implicated in numerous cellular processes including regulation of transcription and translation, pre-mRNA splicing, DNA reparation and mRNA packaging. This protein is also a component of messenger ribonucleoprotein (mRNP) complexes and may have a role in microRNA processing. This protein can be secreted through non-classical pathways and functions as an extracellular mitogen. Aberrant expression of the gene is associated with cancer proliferation in numerous tissues. This gene may be a prognostic marker for poor outcome and drug resistance in certain cancers. Alternate splicing results in multiple

transcript variants. Pseudogenes of this gene are found on multiple chromosomes. [provided

by RefSeq, Sep 2015]





Product images:

Donor Vector Edited Chromosome



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