

## **Product datasheet for KN208875RB**

#### OriGene Technologies, Inc.

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### Von Hippel Lindau (VHL) 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: Von Hippel Lindau

**Locus ID:** 7428

**Components:** KN208875G1, Von Hippel Lindau gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN208875G2**, Von Hippel Lindau gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN208875RBD**, 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 000551</u>, <u>NM 198156</u>, <u>NM 001354723</u>

UniProt ID: <u>P40337</u>

Synonyms: HRCA1; pVHL; RCA1; VHL1

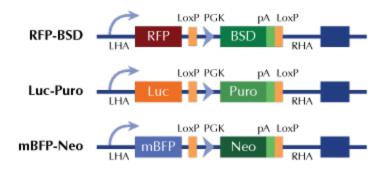
Summary: Von Hippel-Lindau syndrome (VHL) is a dominantly inherited familial cancer syndrome

predisposing to a variety of malignant and benign tumors. A germline mutation of this gene is the basis of familial inheritance of VHL syndrome. The protein encoded by this gene is a component of the protein complex that includes elongin B, elongin C, and cullin-2, and possesses ubiquitin ligase E3 activity. This protein is involved in the ubiquitination and degradation of hypoxia-inducible-factor (HIF), which is a transcription factor that plays a central role in the regulation of gene expression by oxygen. RNA polymerase II subunit POLR2G/RPB7 is also reported to be a target of this protein. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]



# **Product images:**

### Donor Vector Edited Chromosome



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