

## **Product datasheet for KN219851RB**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **VEGF Receptor 2 (KDR) 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: VEGF Receptor 2

**Locus ID:** 3791

**Components: KN219851G1**, VEGF Receptor 2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN219851G2**, VEGF Receptor 2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN219851RBD**, 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 002253</u>

UniProt ID: P35968

Synonyms: CD309; FLK1; VEGFR; VEGFR2

**Summary:** Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This

gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3, T-cell protein tyrosine phosphatase, etc.. Mutations of this gene are implicated in infantile capillary

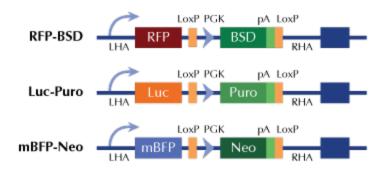
hemangiomas. [provided by RefSeq, May 2009]





# **Product images:**

### Donor Vector Edited Chromosome



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