

## **Product datasheet for KN210218LP**

#### OriGene Technologies, Inc.

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### **BMPR1B Human Gene Knockout Kit (CRISPR)**

#### **Product data:**

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

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: BMPR1B

Locus ID: 658

**Components: KN210218G1**, BMPR1B gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN210218G2**, BMPR1B gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN210218LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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 001203</u>, <u>NM 001256792</u>, <u>NM 001256793</u>, <u>NM 001256794</u>

UniProt ID: 000238

Synonyms: ALK-6; ALK6; AMDD; BDA1D; BDA2; CDw293

Summary: This gene encodes a member of the bone morphogenetic protein (BMP) receptor family of

transmembrane serine/threonine kinases. The ligands of this receptor are BMPs, which are members of the TGF-beta superfamily. BMPs are involved in endochondral bone formation and embryogenesis. These proteins transduce their signals through the formation of heteromeric complexes of 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. Mutations in this gene have been associated with primary pulmonary hypertension. Several transcript variants encoding two different isoforms have been found for this gene.

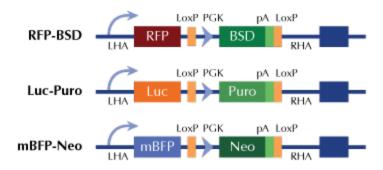
[provided by RefSeq, Feb 2012]





# **Product images:**

#### Donor Vector Edited Chromosome



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