

## Product datasheet for KN205255LP

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### PAK5 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: PAK5 Locus ID: 57144

**Components:** KN205255G1, PAK5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN205255G2**, PAK5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN205255LPD, 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 020341</u>, <u>NM 177990</u>

UniProt ID: Q9P286
Synonyms: PAK5

**Summary:** The protein encoded by this gene is a member of the PAK family of Ser/Thr protein kinases.

PAK family members are known to be effectors of Rac/Cdc42 GTPases, which have been implicated in the regulation of cytoskeletal dynamics, proliferation, and cell survival signaling. This kinase contains a CDC42/Rac1 interactive binding (CRIB) motif, and has been shown to bind CDC42 in the presence of GTP. This kinase is predominantly expressed in brain. It is capable of promoting neurite outgrowth, and thus may play a role in neurite development. This kinase is associated with microtubule networks and induces microtubule stabilization. The subcellular localization of this kinase is tightly regulated during cell cycle progression. Alternatively spliced transcript variants encoding the same protein have been described.

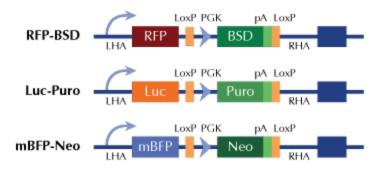
[provided by RefSeq, Jul 2008]





# **Product images:**

### Donor Vector Edited Chromosome



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