

Product datasheet for KN202302BN

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OriGene Technologies, Inc.

PAK4 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: PAK4 Locus ID: 10298

Components: KN202302G1, PAK4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN202302G2, PAK4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN202302BND, donor DNA containing left and right homologous arms and mBFP-Neo

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: NM 001014831, NM 001014832, NM 001014833, NM 001014834, NM 001014835,

NM 005884

UniProt ID: <u>096013</u>

Synonyms: p21 protein (Cdc42/Rac)-activated kinase 4; p21(CDKN1A)-activated kinase 4; p21-activated

kinase 4; protein kinase related to S. cerevisiae STE20, effector for Cdc42Hs

Summary: PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3

and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton

reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins

Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4

interacts specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family

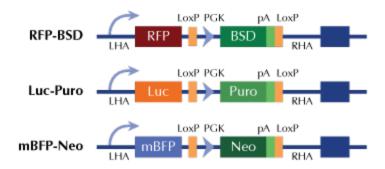
of MAP kinases. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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