

Product datasheet for KN203808BN

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

PYK2 (PTK2B) 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: PYK2 Locus ID: 2185

Components: KN203808G1, PYK2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN203808G2, PYK2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN203808BND, 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: <u>NM 004103, NM 173174, NM 173175, NM 173176</u>

UniProt ID: Q14289

Synonyms: CADTK; CAKB; FADK2; FAK2; PKB; PTK; PYK2; RAFTK

Summary: This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced

regulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. The encoded protein undergoes rapid tyrosine phosphorylation and activation in response to increases in the intracellular calcium concentration, nicotinic acetylcholine receptor activation, membrane depolarization, or protein kinase C activation. This protein has been shown to bind CRK-associated substrate, nephrocystin, GTPase regulator associated with FAK, and the SH2 domain of GRB2. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Four transcript variants encoding two different

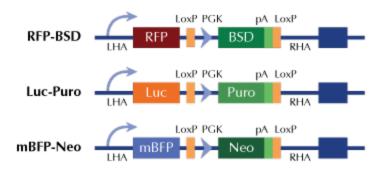
isoforms have been found for this gene. [provided by RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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