

Product datasheet for **KN203808RB**

PYK2 (PTK2B) 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:	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) KN203808RBD , donor DNA containing left and right homologous arms and RFP-BSD functional cassette.

Homologous arm and RFP-BSD sequences:

pUC vector backbone in gray; *Left arm sequence in blue*; *RFP-BSD in green*; *Right arm in violet*

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TTTGTGGCA GCTGAGGATG GGGGTGGACA GCATCAGTTG ACAGCCTGGC CCTCCACCTG GGCCCTTTCC
TGCTTCTCC ATTCCCATTG CCTCGGGGCC ACTTCTTCTC CAATCTGTTT CTTCTCAGAT TTTCCGCCTT
GTCCTGTTC CTCTCCTGCT ATTTTCTACT GTCTCACTCT TTGCTTTTTT TGCTCAGCTG TGCTTGGAA
CCAAGCTGTG ACCGCCTTCT CTCACAGCTG CCTTTGCTAA GGGTGGGCC CCTGCTGGG TGCCAGGGTG
GAGGGAGGAA TGGGTCAGAG AGAGGGGCTT CCAGGAGACA GAGCTCATA CCCTGGGAGC CCCAAGTCTG
GGTTTCATAC CTGGATGCTT CTGCAACTTG CCCCTTTCTG CTGCATCTTT CCCAGTCAAG AGAGCCAGGT
GCCTTGCAGG GGAGCTTTTG GGAATGGGAG AATATATAGC ATTTGTGTCT GTCTTGGAGC TCGGTGGGTG
CTGTCCCTGG GGCCATGAGG TATGTGGGCC TGTGTGGGGC TCTTTCAGGG CTGACCTCT GCTGTCTCTG
CAGGACTGCA ATGTGCCGAT CTTAGCTGCT GCCTGAGAGG TGCAGAGCCC ATGGTGGTGG TACCAGTAGA
TGTGAAAAG GAGGACGTGC GTATCCTCAA GGCTGCTTC TATAGCAACA GCTTCAATCC TGGGAAAAC
TTCAAAGTGG TCAAATGCAC TGTCAGACG GAGATCCGGG TAAGTGTGAA GTGTCTGCC TGTCCTCTG
TCTGTCCCTC TGTCTTCTC CTGGGCAGCT GAGCAGCTCT CCTGCAGCCT CGCAGCTCTC CCATATCCAC
CCCTGGGTGG AAGAGGTGAG GTGGCATCAG AGAGATGTGC TCAGCCTGCA TCACCAGGCC TGCTCTCCAG
ATGTTCCCAT ACTACTTCTC TAGGAGCCTG GGAAACACAT GTTGTAGCCT TTGCTTGAAC CCCAGATAAT
TTGTTTGCC TCTGATTCAA TTCATTTCAA CTTATTAAGT ATTTATGATA CTTGAAGCTC TGCAAGGGAC
TAAAAAGCTG CTGTCCTCAA AGAGTTTACA CTCTGATGAA ATAGGAATTA GAGATACACA AGTGATTGCA
TAAAAATAG AACAAAAGTGTGTGCTGA GCATGTACAG GAAGGCACTG GTGGGGCACT
TAGAGGATGA

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GE100003, scramble sequence in pCas-Guide vector



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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_004103](#), [NM_173174](#), [NM_173175](#), [NM_173176](#)

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:

