

## Product datasheet for RC205372L2V

## OriGene Technologies, Inc.

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## PYK2 (PTK2B) (NM\_173174) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

Product Name: PYK2 (PTK2B) (NM 173174) Human Tagged ORF Clone Lentiviral Particle

Symbol: PYK2

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

**Mammalian Cell** 

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_173174 **ORF Size:** 3027 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC205372).

Sequence:
OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 173174.1

 RefSeq Size:
 4715 bp

 RefSeq ORF:
 3030 bp

 Locus ID:
 2185

 UniProt ID:
 Q14289

Cytogenetics: 8p21.2

**Protein Families:** Druggable Genome, Protein Kinase





## PYK2 (PTK2B) (NM\_173174) Human Tagged ORF Clone Lentiviral Particle - RC205372L2V

**Protein Pathways:** Calcium signaling pathway, Chemokine signaling pathway, GnRH signaling pathway,

Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity

**MW:** 115.7 kDa

Gene 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]