

Product datasheet for RC223303L4

OriGene Technologies, Inc.

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PYK2 (PTK2B) (NM_173176) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PYK2 (PTK2B) (NM_173176) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PYK2

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

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

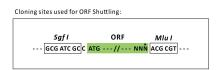
E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC223303).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_173176

ORF Size: 3027 bp



PYK2 (PTK2B) (NM_173176) Human Tagged Lenti ORF Clone - RC223303L4

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 173176.1</u>

 RefSeq Size:
 4180 bp

 RefSeq ORF:
 3030 bp

 Locus ID:
 2185

UniProt ID: Q14289
Cytogenetics: 8p21.2

Protein Families: Druggable Genome, Protein Kinase

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

Leukocyte transendothelial migration, Natural killer cell mediated cytotoxicity

MW: 115.9 kDa

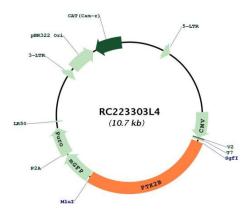
Gene Summary: This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced

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]



Product images:



Circular map for RC223303L4