

Product datasheet for TP509156

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

Prkci (NM_008857) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse protein kinase C, iota (Prkci), with C-terminal MYC/DDK

tag, expressed in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone >MR209156 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MSHTVACGGGGDHSHQVRVKAYYRGDIMITHFEPSISFEGLCSEVRDMCSFDNEQPFTMKWIDEEGDPCT VSSQLELEEAFRLYELNKDSELLIHVFPCVPERPGMPCPGEDKSIYRRGARRWRKLYCANGHTFQAKRFN RRAHCAICTDRIWGLGRQGYKCINCKLLVHKKCHKLVTIECGRHSLPPEPMMPMDQTMHPDHTQTVIPYN PSSHESLDQVGEEKEAMNTRESGKASSSLGLQDFDLLRVIGRGSYAKVLLVRLKKTDRIYAMKVVKKELV NDDEDIDWVQTEKHVFEQASNHPFLVGLHSCFQTESRLFFVIEYVNGGDLMFHMQRQRKLPEEHARFYSA EISLALNYLHERGIIYRDLKLDNVLLDSEGHIKLTDYGMCKEGLRPGDTTSTFCGTPNYIAPEILRGEDY GFSVDWWALGVLMFEMMAGRSPFDIVGSSDNPDQNTEDYLFQVILEKQIRIPRSLSVKAASVLKSFLNKD PKERLGCHPQTGFADIQGHPFFRNVDWDMMEQKQVVPPFKPNISGEFGLDNFDSQFTNEPVQLTPDDDDI

VRKIDQSEFEGFEYINPLLMSAEECV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 67.2 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.





ORIGENE

RefSeq: <u>NP 032883</u>

Locus ID: 18759

UniProt ID: <u>Q62074</u>, <u>Q5DTK3</u>

RefSeq Size: 4465

Cytogenetics: 3 14.65 cM

RefSeq ORF: 1761

Synonyms: 2310021H13Rik; Al427505; aPKClambda; mKlAA4165; Pkci; PkClambda; Prkcl

Summary: Calcium- and diacylglycerol-independent serine/ threonine-protein kinase that plays a general

protective role against apoptotic stimuli, is involved in NF-kappa-B activation, cell survival, differentiation and polarity, and contributes to the regulation of microtubule dynamics in the early secretory pathway. Is necessary for BCR-ABL oncogene-mediated resistance to apoptotic drug in leukemia cells, protecting leukemia cells against drug-induced apoptosis. In cultured neurons, prevents amyloid beta protein-induced apoptosis by interrupting cell death process at a very early step. In glioblastoma cells, may function downstream of phosphatidylinositol 3kinase (PI3K) and PDPK1 in the promotion of cell survival by phosphorylating and inhibiting the pro-apoptotic factor BAD. Can form a protein complex in non-small cell lung cancer (NSCLC) cells with PARD6A and ECT2 and regulate ECT2 oncogenic activity by phosphorylation, which in turn promotes transformed growth and invasion. In response to nerve growth factor (NGF), acts downstream of SRC to phosphorylate and activate IRAK1, allowing the subsequent activation of NF-kappa-B and neuronal cell survival. Functions in the organization of the apical domain in epithelial cells by phosphorylating EZR. This step is crucial for activation and normal distribution of EZR at the early stages of intestinal epithelial cell differentiation. Forms a protein complex with LLGL1 and PARD6B independently of PARD3 to regulate epithelial cell polarity. Plays a role in microtubule dynamics in the early secretory pathway through interaction with RAB2A and GAPDH and recruitment to vesicular tubular clusters (VTCs). In human coronary artery endothelial cells (HCAEC), is activated by saturated fatty acids and mediates lipid-induced apoptosis (By similarity). Downstream of PI3K is required for insulin-stimulated glucose transport. Activates RAB4A and promotes its association with KIF3A which is required for the insulin-induced SLC2A4/GLUT4 translocation in adipocytes. Is essential in early embryogenesis and development of differentiating photoreceptors by playing a role in the establishment of epithelial and neuronal polarity. Involved in early synaptic long term potentiation phase in CA1 hippocampal cells and short term memory formation (By similarity).[UniProtKB/Swiss-Prot Function]