
Recombinant Human PKC iota / PRKCI Protein (GST tag)**Cat.NO.: TP06582**

3th Edition

Synonyms:DXS1179E;nPKC-iota;PKCI

Description:Protein kinase C iota type, also known as Atypical protein kinase C-lambda/iota, aPKC-lambda/iota and PRKCI, is a cytoplasm, membrane and nucleus protein which belongs to the protein kinase superfamily, AGC Ser/Thr protein kinase family and PKC subfamily. PRKCI contains one AGC-kinase C-terminal domain, one OPR domain, one phorbol-ester/DAG-type zinc finger and one protein kinase domain. PRKCI is predominantly expressed in lung and brain, but also expressed at lower levels in many tissues including pancreatic islets. It is highly expressed in non-small cell lung cancers. PRKCI is a calcium-independent, phospholipid-dependent, serine- and threonine-specific kinase. It may play a role in the secretory response to nutrients. PRKCI is involved in cell polarization processes and the formation of epithelial tight junctions. It is implicated in the activation of several signaling pathways including Ras, c-Src and NF-kappa-B pathways. PRKCI functions in both pro- and anti-apoptotic pathways. It functions in the RAC1/ERK signaling required for transformed growth. PRKCI plays a role in microtubule dynamics through interaction with RAB2A and GAPDH and recruitment to vesicular tubular clusters (VTCs). PRKCI might be a target for novel lipid activators that are elevated during nutrient-stimulated insulin secretion.

Form:PBS**Molecular Weight:**93.5 kDa**Sequences:**Met 10-Val 596**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.