

# Recombinant human PKC iota protein

Catalog Number: ATGP4081

## PRODUCT INFORMATION

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### Expression system

HEK293

### Domain

1-596aa

### UniProt No.

P41743

### NCBI Accession No.

NP\_002731.4

### Alternative Names

DXS1179E, nPKC-iota, PKCI, aPKC-lambda/iota, PRKC-lambda/iota, Protein kinase C iota type, Atypical protein kinase C-lambda/iota, PRKCL, Protein Kinase C iota, PRKCI

## PRODUCT SPECIFICATION

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### Molecular Weight

69kDa(602aa)

### Concentration

0.5mg/ml (determined by Absorbance at 280nm)

### Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 80% by SDS - PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

PKC iota, also known as Protein Kinase C iota, is a member of serine/threonine protein kinases family. It play a key regulatory role in a number of cellular functions including cell growth and differentiation, hormone secretion, and gene expression. It is involved in cell polarization processes and the formation of epithelial tight junctions.

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This protein kinase is calcium-independent and phospholipid-dependent. It is also implicated in the activation of several signaling pathways including Ras, c-Src and NF-kappa-B pathways. Recombinant human PKC iota, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

MPTQRDSSTM SHTVAGGGSG DSHQVRVKA YYRGDIMITH FEPSISFEGL CNEVRDMCSF DNEQLFTMKW IDEEGDPCTV  
SSQLELEEAF RLYELNKDSE LLIHVFCVPE ERPGMPCPGE DKSIIYRRGAR RWRKLYCANG HTFQAKRFNR RAHCAICTDR  
IWGLGRQGYK CINCKLLVHK KCHKLVITIEC GRHSLPQEPV MPMDQSSMHS DHAQTVIPYN PSSHESLDQV GEEKEAMNTR  
ESGKASSSLG LQDFDLLRVI GRGSYAKVLL VRLKKTDRYI AMKVVKKELV NDDEDIDWVQ TEKHFVEQAS NHPFLVGLHS  
CFQTESRLFF VIEYVNGGDL MFHMQRQRKL PEEHARFYSA EISLALNYLH ERGIYRDLK LDNVLLDSEG HIKLTDYGMC  
KEGLRPGDTT STFCGTPNYI APEILRGEDY GFSVDWWALG VLMFEMMAGR SPFDIVGSSD NPDQNTEDYL FQVILEKQIR  
IPRSLSVKAA SVLKSFLNKD PKERLGCHPQ TGFADIQGHF FFRNVVDWDM EQKQVVPFK PNISGEFGLD NFDSQFTNEP  
VQLTPDDDDI VRKIDQSEFE GFEYINPLLM SAEECV<HHHH HH>

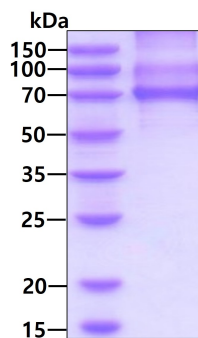
## General References

Dey A et al, (2021) Cell Signal. 77:109819.

Li HS et al, (2019) J Neurosci. 39:5773-5793.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain