

## ProQinase™ PKC-nu

protein kinase D3

Recombinant Human Active Protein Kinase

HGNC Symbol: PRKD3

Synonyms: PRKD3; EPK2; PRKCN

Product No.: 0661-0000-1

Lot: 003

**Description:** Human PKC-nu, full length, amino acids A<sub>3</sub>-P<sub>890</sub> (as in [NCBI/Protein](#) entry NP\_005804.1), untagged, expressed in Sf9 insect cells

**Product identity:** PKC-nu Lot 003, was confirmed as PKC-nu by mass spectroscopy LC-ESI-MS/MS

**Theoretical MW<sub>Fusion Protein</sub>:** 100,793 Da

**Expression host:** Sf9 insect cells

**Purification:** GST-Affinity Chromatography

**Activation:** This kinase was not activated by special procedures

**Storage buffer:** 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20 % glycerol

**Storage temperature:** -80°C

For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

**Protein concentration:** 0.122 µg/µl

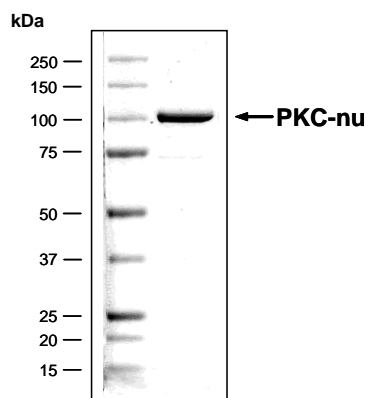
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

### Biochemical Parameters:

Specific kinase activity (P<sub>i</sub> transfer): 16 pmol/µg × min

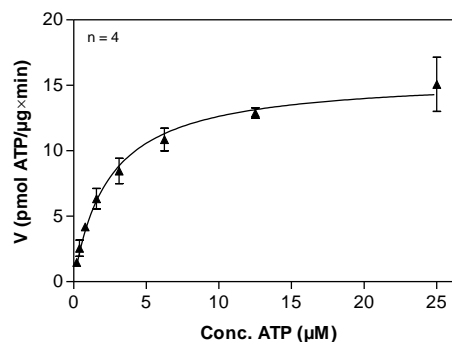
ATP-K<sub>M</sub>: 2.4 µM

### PKC-nu Lot 003: Coomassie stain



2.0 µg PKC-nu

### PKC-nu Lot 003: Determination of V<sub>max</sub> and K<sub>M</sub> value for ATP



- Assay conditions:
  - 60 mM HEPES-NaOH, pH 7.5
  - 3 mM MgCl<sub>2</sub>
  - 3 mM MnCl<sub>2</sub>
  - 3 µM Na-orthovanadate
  - 1.2 mM DTT
  - 50 µg/ml PEG<sub>20,000</sub>
  - ATP (variable)
  - Substrate: Tetra(LRRWSLG), 20 µg/ml
  - Kinase: 1 µg/ml
- Filter binding assay
- MSPH membrane (Millipore)

### Additional assay technology:

PKC-nu Lot 003 was also successfully tested by Reaction Biology for the use with the ADP-Glo™ Kinase assay from Promega ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details

## ProQinase™ PKC-nu

Product No.: 0661-0000-1

PKC-nu Recombinant Fusion Protein Amino Acid Sequence							
1	GPLAMAANNS	PPSAQKSVLP	TAIPAVLPAA	SPCSSPKTGL	SARLSNGSFS	APSLTNSRGS	60
61	VHTVSFLLQI	GLTRESVTIE	AQELSLSAVK	DLVCSIVYQK	FPECGFFGMY	DKILLFRHDM	120
121	NSENILQLIT	SADEIHEGDL	VEVLSALAT	VEDFQIRPHT	LYVHSYKAPT	FCDYCGEMLW	180
181	GLVRQGLKCE	GCGLNYHKRC	AFKIPNNCSG	VRKRRLSNVS	LPGPGLSVPR	PLQPEYVALP	240
241	SEESHVHQEP	SKRIPSWSGR	PIWMEKMVMC	RVKVPHTFAV	HSYTRPTICQ	YCKRLLKGLF	300
301	RQGMQCKDCK	FNCHKRCASK	VPRDCLGEVT	FNGEPSSLGT	DTDIPMDIDN	NDINSDSSRG	360
361	LDDTEEPSPP	EDKMFFLDPS	DLDVERDEEA	VKTISPSTSN	NIPLMRVVQS	IKHTKRKSST	420
421	MVKEGWMVHY	TSRDNLKRKH	YWRDLSKCLT	LFQNESGSKY	YKEIPLSEIL	RISSPRDFTN	480
481	ISQGSNPFCF	EIITDTMVYF	VGENNGDSSH	NPVLAATGVG	LDVAQSWEKA	IRQALMPVTP	540
541	QASVCTSPGQ	GKDHKDLSTS	ISVSNCOIQE	NVDISTVYQI	FADEVLGSGQ	FGIVYGGKHR	600
600	KTGRDVAIKV	IDKMRFPKTK	ESQLRNEVAI	LQNLHHPGIV	NLECMFETPE	RVFVVMKELH	660
661	GDMLEMILSS	EKSRLPERIT	KFMVTQILVA	LRNLHFKNIV	HCDLKPENVL	LASAEPFPQV	720
721	KLCDFGFARI	IGEKSFRRSV	VGTPAYLAPE	VLRSGYNRS	LDMWSVGVI I	YVSLSGTFPF	780
781	NEDEDINDQI	QNAAFMYPPN	PWREISGEAI	DLINLLQVK	MRKRYSDKS	LSHPWLQDYQ	840
841	TWLDLREFET	RIGERYITHE	SDDARWEIHA	YTHNLVYPKH	FIMAPNPDDM	EEDP	900

1-6: legacy of tag cleavage blue: PKC-nu

PKC-nu wt <sup>1</sup> Amino Acid Sequence							
1	MSANNPPSA	QKSVLPTAIP	AVLPAASPCS	SPKTGLSARL	SNGSFSAPSL	TNSRGSVHTV	60
61	SFLLQIGLTR	ESVTIEAQEL	SLSAVKDLVC	SIVYQKFPEC	GFFGMYDKIL	LFRHDMNSEN	120
121	ILQLITSADE	IHEGDLVEVV	LSALATVEDF	QIRPHTLYVH	SYKAPTFCDY	CGEMLWGLVR	180
181	OGLKCEGCGL	NYHKRCAFKI	PNNCSGVRKR	RLSNVSLPGP	GLSVPRPLQP	EYVALPSEES	240
241	HVHQEPSKRI	PSWGRPIWM	EKMVMCRVKV	PHTFAVHSYT	RPTICQYCKR	LLKGLFRQGM	300
301	QCKDCKFNCH	KRCASKVPRD	CLGEVTFNGE	PSSLGTDTDI	PMDIDNNDIN	SDSSRGLDDT	360
361	EPPSPPEDKM	FFLDPSDLDV	ERDEEAVKTI	SPSTSNNIPL	MRVVQSIKHT	KRKSSTMVKE	420
421	GWMVHYTSRD	NLRKRHYWRL	DSKCLTLFQN	ESGSKYYKEI	PLSEILRISS	PRDFTNISQG	480
481	SNPHCFEIIIT	DTMVYFVGEN	NGDSSHNPLV	AATGVGLDVA	QSWEKAIRQA	LMPVTPQASV	540
541	CTSPGQGDH	KDLSTSISVS	NCQIQENVDI	STVYQIFADE	VLGSGQFGIV	YGGKHKRTGR	600
600	DVAIKVIDKM	RFPTKQESQL	RNEVAILQNL	HHPGIVNLEC	MFETPERVFE	VMEKLGDMML	660
661	EMILSSEKSR	LPERITKFMV	TQILVALRNL	HFKNIVHCDL	KPENVLLASA	EPFPQVKLCD	720
721	FGFARIIGEK	SFRRSVVGTP	AYLAPEVLR	KGYNRSLDMW	SVGVIIYVSL	SGTFPFNEDE	780
781	DINDQIQNAA	FMYPPNPWRE	ISGEAIDLIN	NLLQVKMRKR	YSVDKLSLHP	WLQDYQTWLD	840
841	LREFETRIGE	RYITHESDDA	RWEIHAYTHN	LVYPKHFIMA	PNPDDMEEDP		900

blue: kinase sequence expressed in recombinant protein

<sup>1</sup>[NCBI/Protein](#) accession number NP\_005804.1