

## ProQinase™ CLK3

CDC-like kinase 3

Recombinant Human Active Protein Kinase

HGNC Symbol: CLK3

Synonyms: PHCLK3

Product No.: 0921-0000-1

Lot: 002

**Description:** Human CLK3, full length, amino acids M<sub>1</sub>-R<sub>490</sub> (as in [NCBI/Protein](#) entry NP\_003983.2), untagged, expressed in Sf9 insect cells

**Product identity:** CLK3 Lot 002, was confirmed as CLK3 by mass spectroscopy LC-ESI-MS/MS

**Theoretical MW**<sub>Fusion Protein</sub>: 59,157 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:** 0.138 µg/µl  
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

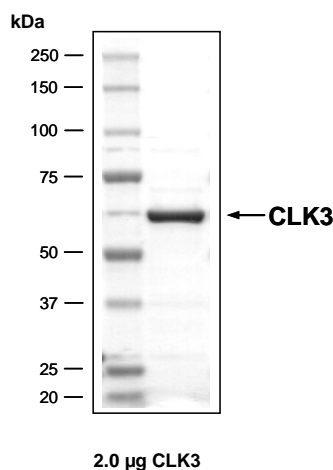
### Biochemical Parameters:

Specific kinase activity (P<sub>i</sub> transfer): 76 pmol/µg × min  
ATP-K<sub>M</sub>: 0.6 µM

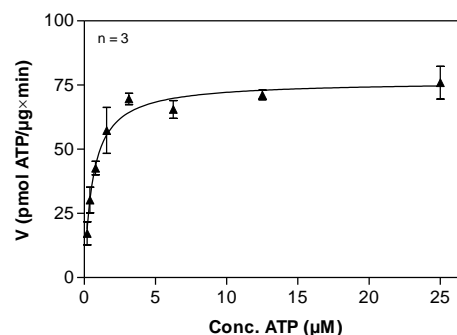
### Additional assay technology:

CLK3 Lot 002 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

### CLK3 Lot 002: Coomassie stain



### CLK3 Lot 002: Determination of V<sub>max</sub> and K<sub>M</sub> value for ATP



### Determination of K<sub>M</sub> value & Specific activity:

- 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: RS-peptide 40 µg/ml
  - Kinase: 0.2 µg/ml
- Filter binding assay
- MSPH membrane (Millipore)

## ProQinase™ CLK3

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CLK3 Recombinant Fusion Protein Amino Acid Sequence								
1	GPLAMV	MHHC	KRYRSPEPDP	YLSYRWKRRR	SYSREHEGRL	RYPSRREPPP	RRSRSRSHDR	60
61	LPYQRRYRER	RSDSTYRCEE	RSPSFGEDYY	GPSRSRHRRR	SRERGPYRTR	KHAHHCHKRR		120
121	TRSCSSASSR	SQSSKRSSR	SVEDDKEGHL	VCRIGDWLQE	RYEIVGNLGE	GTFGKVVECL		180
181	DHARGKSQVA	LKIIRNVGKY	REAAARLEINV	LKKIKEKDKE	NKFLCVLMSD	WVNFHGHMCI		240
241	AFELLGKNTF	EFLKENNFQP	YPLPHVRHMA	YQLCHALRFL	HENQLTHTDL	KPENILFVNS		300
301	EFETLYNEHK	SCEEKSVKNT	SIRVADFGSA	TFDHEHHTTI	VATRHYRPE	VILELGWAQP		360
361	CDVWSIGCIL	FEYYRGFTLF	QTHENREHLV	MMEKILGPIP	SHMIHRTRKQ	KYFYKGGVLVW		420
421	DENSSDGRYV	KENCKPLKSY	MLQDSLEHVQ	LFDLMRRMLE	FDPAQRITLA	EALLHPFFAG		480
481	LTPEERSFHT	SRNPSR						540

1-6: legacy from 3C cleavage **blue**: CLK3

CLK3 wt <sup>1</sup> Amino Acid Sequence							
1	MHCKRYRSP	EPDPYLSYRW	KRRRSYSREH	EGRLRYPSRR	EPPRRRSR	SHDRLPYQRR	60
61	YRERRSDTY	RCEERSPSFG	EDYYGPSRSR	HRRRSRERGP	YRTRKHAHHC	HKRRTRSCSS	120
121	ASSRSQSSK	RSSRSVEDDK	EGHLVCRIGD	WLQERYEIVG	NLGGFTFGKV	VECLDHARGK	180
181	SQVALKIIRN	VGKYREARL	EINVLKKIKE	KDKENKFLCV	LMSDWFNFGH	HMCIAFELLG	240
241	KNTFEFLKEN	NFQPYPLPHV	RHMAYQLCHA	LRFLHENQLT	HTDLKPENIL	FVNSEFETLY	300
301	NEHKSCEEKS	VKNTSIRVAD	FGSATFDHEH	HTTIVATRHY	RPPEVILELG	WAQPCDVWSI	360
361	GCILFEYYRG	FTLFQTHENR	EHLVMMEKIL	GPIPSHMIHR	TRKQKYFYKG	GLVWDENSSD	420
421	GRYVKENCKP	LKSYMLQDSL	EHVQLFDLMR	RMLEFDPAQR	ITLAEALLHP	FFAGLTPEER	480
481	SFHTSRNPSR						540

**blue**: CLK3 sequence expressed in recombinant protein

<sup>1</sup>[NCBI/Protein](#) accession number NP\_003983.2