

## ProQinase™ CDK6

cyclin dependent kinase 6

Recombinant Human Protein Kinase

HGNC Symbol: CDK6

Synonyms: PLSTIRE

Product No.: 0051-0000-1

Lot: 002

**Description:** Human CDK6, amino acids M<sub>1</sub>-A<sub>326</sub> (as in NCBI/Protein entry NP\_001250.1), N-terminal GST-fusion protein, expressed in Sf9 insect cells

**Product identity:** CDK6, Lot 002, was confirmed as CDK6 by Western Blotting, using a CDK6 specific antibody

**Theoretical MW**<sub>Fusion Protein</sub>: 63,279 Da

**Expression:** Baculovirus infected Sf9 cells

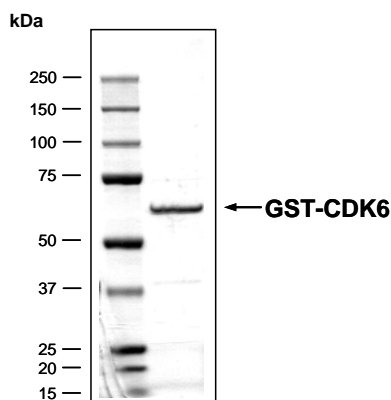
**Purification:** GST-Affinity Chromatography

**Storage buffer:** 50 mM Tris pH 8.0, 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20% glycerol

**Storage temperature:** -80°C  
Avoid repeated freeze-thaw cycles!

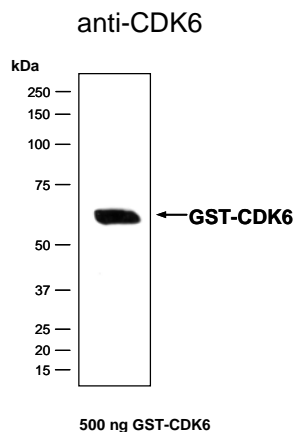
**Protein concentration:** 0.620 µg/µl  
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

### CDK6 Lot 002: Coomassie stain

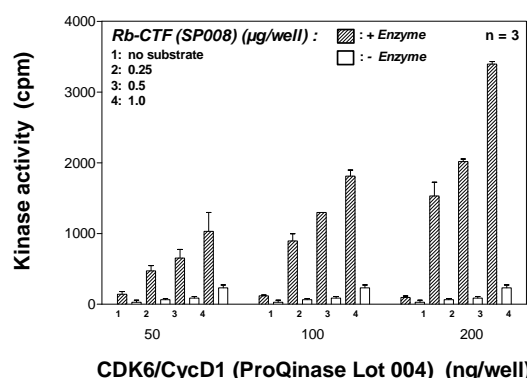
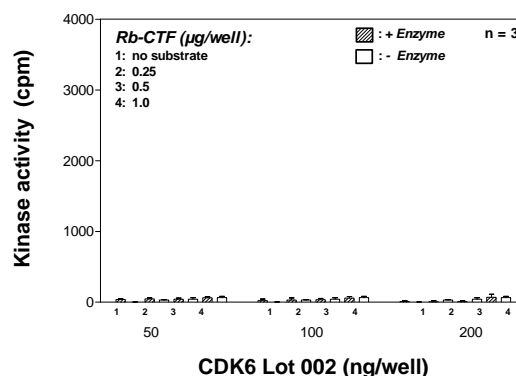


2.0 µg GST-CDK6

### CDK6 Lot 002: Western Blot Analysis



### Kinase activity CDK6 vs active CDK6/CycD1:



### Final assay concentrations:

- 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>
- 1 µM ATP (610,000 cpm <sup>33</sup>P-γ-ATP)
- Substrate (variable): RB-CTF
- Recombinant CDK6 or CDK6/CycD1 (variable)

Assay: <sup>33</sup>PanQinase® Assay

## ProQinase™ CDK6

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CDK6 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	<b>LVPRGSMEKD</b>	<b>GLCRADQQYE</b>	240
241	<b>CVAEIGEGAY</b>	<b>GKVFKARDLK</b>	<b>NGGRFVALKR</b>	<b>VRVQTGEEGM</b>	<b>PLSTIREVAV</b>	<b>LRHLETFEHP</b>	300
301	<b>NVRLFDVCT</b>	<b>VSRTDRETKL</b>	<b>TLVFEHVDQD</b>	<b>LTTYLDKVPE</b>	<b>PGVPTETIKD</b>	<b>MMFQLLRGLD</b>	360
361	<b>FLHSHRVVHR</b>	<b>DLKPQNILVT</b>	<b>SSGQIKLADF</b>	<b>GLARIYSFQM</b>	<b>ALTSVVVTLW</b>	<b>YRAPEVLLQS</b>	420
421	<b>SYATPVDLWS</b>	<b>VGCIFAEMFR</b>	<b>RKPLFRGSSY</b>	<b>VDQLGKILDV</b>	<b>IGLPGEEDWP</b>	<b>RDVALPRQAF</b>	480
481	<b>HSKSAQPIEK</b>	<b>FVTDIDELGK</b>	<b>DLLLKCLTFN</b>	<b>PAKRISAYSA</b>	<b>LSHPYFQDLE</b>	<b>RCKENLDSHL</b>	540
541	<b>PPSQNTSELN</b>	<b>TA</b>					600

1-218: GST **Pink: Thrombin** **blue: CDK6 fragment**

CDK6 wt <sup>1</sup> amino acid sequence							
1	<b>MEKDG LCRAD</b>	<b>QQYECVAEIG</b>	<b>EGAYGKVFKA</b>	<b>RDLKNGGRFV</b>	<b>ALKRVRVQTG</b>	<b>EEGMPLSTIR</b>	60
61	<b>EVAVLRHLET</b>	<b>FEHPNVRLF</b>	<b>DVCTVSR TDR</b>	<b>ETKLTLVFEH</b>	<b>VDQDLTTYLD</b>	<b>KVPEPGVPTE</b>	120
121	<b>TIKDMMFQLL</b>	<b>RGLDFLHSHR</b>	<b>VVHRDLKPQN</b>	<b>ILVTSSGQIK</b>	<b>LADFLARIY</b>	<b>SFQMALTSVV</b>	180
181	<b>VTLWYRAPEV</b>	<b>LLQSSYATPV</b>	<b>DLWSVGCIFA</b>	<b>EMFRRKPLFR</b>	<b>GSSVDQLGK</b>	<b>ILDVIGLPGE</b>	240
241	<b>EDWPRDVALP</b>	<b>RQAFHSKSAQ</b>	<b>PIEKFVT DID</b>	<b>ELGKDLLLKC</b>	<b>LTFNPAKRIS</b>	<b>AYSALSHPYF</b>	300
301	<b>QDLERCKENL</b>	<b>DSHLPPSQNT</b>	<b>SELNTA</b>				360

**blue:** CDK6 sequence expressed in fusionprotein **Red:** variant in fusionprotein

<sup>1</sup>NCBI/Protein accession number NP\_001250.1

Recombinant Proteins