

CDK1

cyclin dependent kinase 1

Recombinant Human Protein Kinase

HGNC Symbol: CDK1

Synonyms: CDC2, CDC28A

Product No.: 0134-0000-1

Lot: 001

Description: Human CDK1, amino acids M₁-M₂₉₇ (as in [NCBI/Protein](#) entry NP_001777.1), N-terminal GST-HIS₆ fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

Product identity: CDK1 was confirmed as CDK1 by specific Western Blotting

Theoretical MW_{Fusion Protein}: 63,882 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

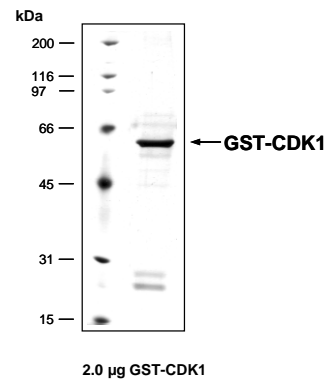
Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 7.5 mM reduced glutathione, 20 % glycerol

Storage temperature: -80°C

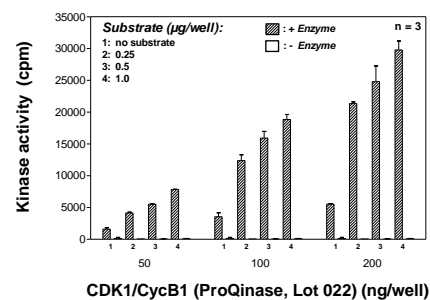
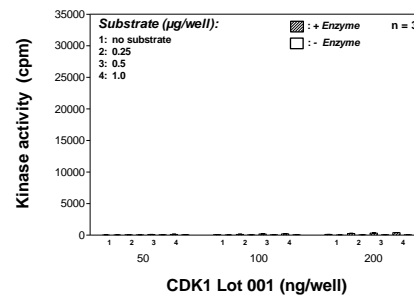
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.080 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

CDK1 Lot 001: Coomassie stain



Kinase activity CDK1 vs active CDK1/CycB1:



Final assay concentrations:

- 60 mM HEPES-NaOH, pH 7.5
- 3 mM MgCl₂
- 3 mM MnCl₂
- 3 µM Na-orthovanadate
- 1.2 mM DTT
- 50 µg / ml PEG_{20,000}
- 1 µM ATP (610,000 cpm ³³P-γ-ATP)
- Substrate (variable): Histone H1
- Recombinant CDK1 or CDK1/CycB1 (variable)

Assay: ³³PanQinase® Assay

This product was manufactured at ProQinase in Freiburg, Germany, and is for in vitro research use only, not for use in humans or animals. ProQinase disclaims any warranty explicitly or implied that the use of the product or parts of the product is free from third party intellectual property claims unless this is explicitly stated.

CDK1

Product No.: 0134-0000-1

GST-CDK1 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWAQATF	GGGDHPPKSD	PMGHHHHHHG	RRRASVAAGI	240
241	LVPRGSPGLD	GICSIIEFTM	EDYTKIEKIG	EGTYGVVYKG	RHKTGQVVA	MKKIRLESSE	300
301	EGVPSTAIRES	ISLLKELRHP	NIVSLQDVLM	QDSRLYLIFE	FLSMDLKKYL	DSIPPGQYMD	360
361	SSLVKSILYQ	ILQGIVFCHS	RRVLHRDLKP	QNLLIDDKGT	IKLADFGLAR	AFGIPIRVYT	420
421	HEVVTLWYRS	PEVLLGSARY	STPVDIWSIG	TIFAELATKK	PLFHGDSEID	QLFRIFRALG	480
481	TPNNEVWPEV	ESLQDYKNTF	PKWKPGSLAS	HVKNLDEGL	DLLSKMLIYD	PAKRISGKMA	540
541	LNHPYFNLDL	NQIKKM					600

1-218: GST Red: HIS6-tag Pink: Thrombin cleavage site blue: CDK1 boxed: variation from RefSeq

CDK1 wt ¹ Amino Acid Sequence							
1	MEDYTKIEKI	GEGTYGVVYK	GRHKTGQVV	AMKKIRLESE	EEGVPSTAIR	EISLLKELRH	60
61	PNIVSLQDVL	MQDSRLYLIF	EFLSMDLKKY	LDSIPPGQYM	DSSLVKSILY	QILQGIVFCH	120
121	SRRVLHRDLK	PQNLLIDDKG	TIKLADFGLA	RAFGIPIRVY	THEVVTLWYR	SPEVLLGSAR	180
181	YSTPVDIWSI	GTIFAELATK	KPLFHGDSEI	DQLFRIFRAL	GTPNNEVWPE	VESLQDYKNT	240
241	FPKWKPGSLA	SHVKNLDENG	LDLLSKMLIY	DPAKRISGKM	ALNHPYFNLD	DNQIKKM	300

blue: CDK1 sequence expressed in recombinant protein Red: variant in recombinant protein

¹[NCBI/Protein](https://www.ncbi.nlm.nih.gov/protein/1000000000) accession number NP_001777.1

This product was manufactured at ProQinase in Freiburg, Germany, and is for in vitro research use only, not for use in humans or animals. ProQinase disclaims any warranty explicitly or implied that the use of the product or parts of the product is free from third party intellectual property claims unless this is explicitly stated.