

Certificate of Analysis (CoA)

1. Product Information

Description	KeyTec® CDK1/CyclinE2, N-GST/N-GST		
CAT.	P1HI0180S/P1HI0180L	Size	10 µg/100 µg
LOT.	ABW01SA	Storage Condition	-80 °C
Validity Period	Up to 1 year from date of receipt, when stored and handled as recommended. And avoid repeated freeze-thaws cycles.		

2. Protein description

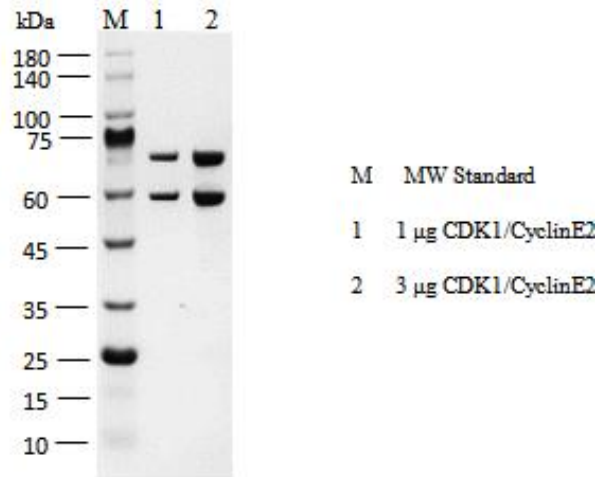
KeyTec® CDK1/CyclinE2, N-GST/N-GST recombinant protein consists of CDK1 with a GST tag at the N-terminus and CyclinE2 with a GST tag at the N-terminus. The protein was purified using GST affinity purification. This CDK1/CyclinE2 protein batch has high enzymatic activity in the ADP-Glo assay.

3. Physical Characteristics

AA Sequences	Uniprot: CDK1: P06493-1; M1-M297(end); CyclinE2: O96020, M1-H404
Tag	CDK1: N-terminal GST tag; CyclinE2: N-terminal GST tag
Molecular Weight	CDK1: 60.7 kDa; CyclinE2: 72.6 kDa
Species	Human
Expression host	<i>Sf9</i>
Purity	0.32 mg/mL by OD280
Protein Concentration	>95% by SDS-PAGE
Form	Liquid
Formulation	50 mM Tris, 150 mM NaCl, 1 mM DTT, 0.05% Brij35, 10% glycerol, pH7.5

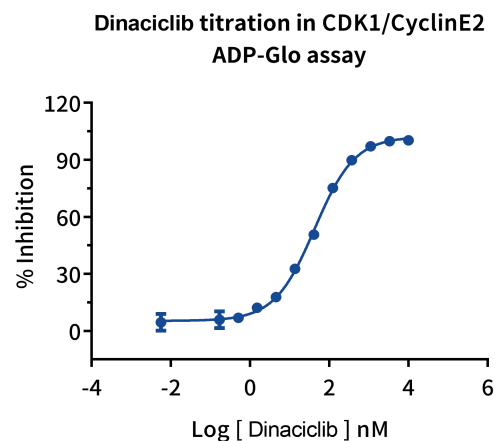
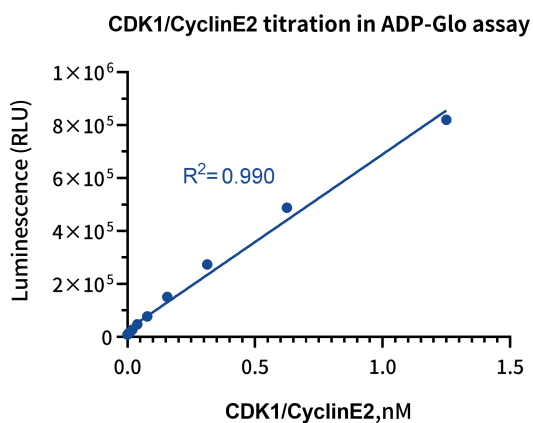
4. Quality Control

A: SDS-PAGE



B: CDK1/CyclinE2 titration

This CDK1/CyclinE2 recombinant protein was verified using the ADP-Glo assay and showed high enzymatic activity. The enzymatic reaction was performed by incubating CDK1/CyclinE2 protein, ATP, and substrate at 25 °C for 60 minutes, followed by the ADP-Glo Kinase Assay measures ADP formed from the enzymatic reaction. The luminescent signal was measured using the Chemiluminescent module of a microplate reader.



5. Primary Sequence

Primary Sequence for CDK1/CyclinE2							
Green: GST; Red: TEV; Black: CDK1							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLIERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQ SMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
180	KRIEAIPQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	ENLYFQGSME	DYTKIEKIGE	240
241	GTYGVVYKGR	HKTTGQVVAM	KKIRLESEEE	GVPSTAI REI	SLLKELRHPN	IVSLQDVL MQ	300
301	DSRLYLIFEF	LSMDLK KYLD	SIPPGQYMDS	SLVKS YLYQI	LQGIVFCHSR	RVLHRDLK PQ	360
361	NLLIDDKGTI	KLADFG LARA	FGIPIRVYTH	EVVTLWYRSP	EVLLGSARYS	TPVDIWSIGT	420
421	IFAELATKKP	LFHGDSEIDQ	LFRIFRALGT	PNNEVWPEVE	SLQDYKNTFP	KWKPGSLASH	480
481	VKNLDENGLD	LLSKMLIYDP	AKRISGKMAL	NHPYFNLDLN	QIKKM		540
Green: GST; Black: CyclinE2							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLIERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQ SMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
180	KRIEAIPQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	GSM SRRSSRL	QAKQQPQPSQ	240
241	TESPQEAQII	QAKKRKTQD	VKKRREEVTK	KHQYEIRNCW	PPVLSGGISP	CII IETPHKE	300
301	IGTSDFSRFT	NYRFKNLFIN	PSPLPDLSWG	CSKEVWLNML	KKESRYVHDK	HFEVLHSDLE	360
361	PQMRSILLDW	LLEVCEVYTL	HRETFYLAQD	FFDRFMLTQK	DINKNMLQLI	GITSLFIASK	420
421	LEEIYAPKLQ	EFAYVTDGAC	SEEDILRMEL	IILKALKWEL	CPVTIISWLN	LFLQVDALKD	480
481	APKVLLPQYS	QETFIQIAQL	LDLCILAIDS	LEFQYRILTA	AALCHFTSIE	VVKKASGLEW	540
541	DSISECV DWM	VPFVNVVKST	SPVKLKTFFK	IPMEDRHNIQ	THTNYLAMLE	EVNYINTFRK	600
601	GGQLSPVCNG	GIMTPPKSTE	KPPGKH				660