

## Certificate of Analysis

### 1. Product Information

<b>Description</b>	<b>KeyTec® CDK16/CyclinY, N-GST/N-GST</b>		
<b>CAT.</b>	P1HI0181S/P1HI0181L	<b>Size</b>	10 µg/100 µg
<b>LOT.</b>	ABW01SA	<b>Storage at</b>	-80 °C
<b>Validity Period</b>	Up to 1 year from date of receipt, when stored and handled as recommended. And avoid repeated freeze-thaw cycles.		

### 2. Product Description

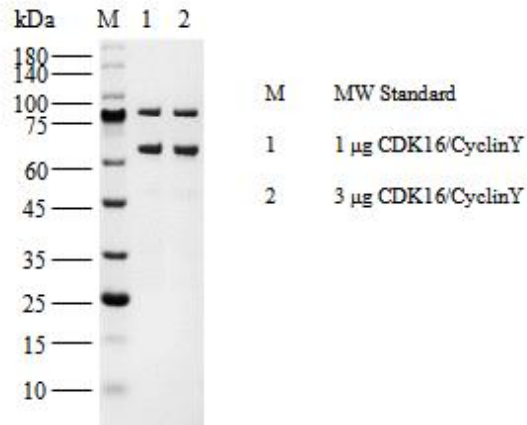
**KeyTec® CDK16/CyclinY, N-GST/N-GST** recombinant protein with N-terminal GST-tagged CDK16 and N-terminal GST-tagged CyclinY was purified by GST affinity chromatography. The CDK16/CyclinY recombinant protein showed high activity in ADP-Glo assay.

### 3. Physical Characteristics

<b>AA Sequences</b>	Uniprot: CDK16: Q00536, M1-F496(end); CyclinY: Q8ND76, M1-S341(end)
<b>Tag</b>	CDK16: N-terminal GST tag; CyclinY: N-terminal GST tag
<b>Molecular Weight</b>	CDK16: 81.5 kDa; CyclinY: 65.2 kDa
<b>Species</b>	Human
<b>Expression Host</b>	<i>Sf9</i>
<b>Protein Concentration</b>	0.35 mg/mL by OD280
<b>Purity</b>	>95% by SDS-PAGE
<b>Form</b>	Liquid
<b>Formulation</b>	50 mM Tris, 150 mM NaCl, 1 mM DTT, 10% glycerol, 0.05% Brij35, pH7.5

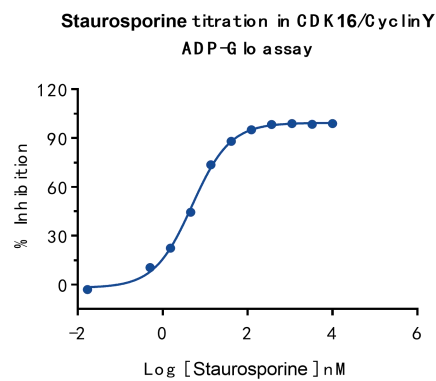
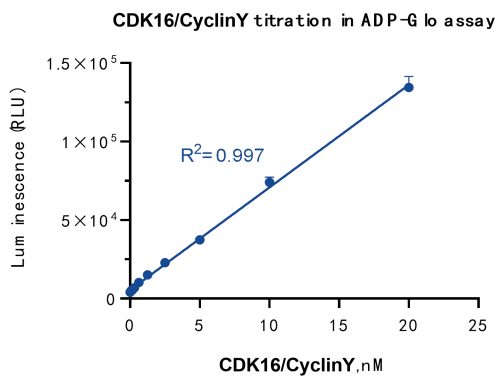
## 4. Quality Control

### A: SDS-PAGE



### B: CDK16/CyclinY titration

The CDK16/CyclinY activity was detected using ADP-Glo technology. The reaction was performed by incubating the CDK16/CyclinY protein, ATP and substrate at 25 °C for 60 min, then reading RLU by Microplate Reader with Luminescence.



## 5. Primary Sequence

Primary Sequence for CDK16/CyclinY							
Green: GST; Black: CDK16							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	GSM DRMKKIK	RQLSMTLRGG	240
241	RGIDKTNGAP	EQIGLDESGG	GGGSDPGEAP	TRAAPGELRS	ARGPLSSAPE	IVHEDLKMGS	300
301	DGESDQASAT	SSDEVQSPVR	VRMRNHPPRK	ISTEDINKRL	SLPADIRLPE	GYLEKLTLS	360
361	PIFDKPLSRR	LRRVSLSEIG	FGKLETYIKL	DKLGEGTYAT	VYKGKSKLTD	NLVALKEIRL	420
421	EHEEGAPCTA	IREVSLLKDL	KHANIVTLHD	IIHTEKSLTL	VFEYLDKDLK	QYLDDCGNII	480
481	NMHNVKLFLF	QLLRGLAYCH	RQKVLHRDLK	PQNLLINERG	ELKLADFGLA	RAKSIPTKTY	540
541	SNEVVTWYR	PPDILLGSTD	YSTQIDMWGV	GCIFYEMATG	RPLFPGSTVE	EQLHFIFRIL	600
601	GTPTEETWPG	ILSNEEFKTY	NYPKYRAEAL	LSHAPRLDSD	GADLLTKLLQ	FEGRNRIAE	660
661	DAMKHPFFLS	LGERIHKLPD	TTSIFALKEI	QLQKEASLRS	SSMPDSGRPA	FRVVDTEF	720
Green: GST; Black: CyclinY							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	GSMGNTTSCC	VSSSPKLRRN	240
241	AHSRLESYRP	DTDLSREDTG	CNLQHISDRE	NIDDLNMEFN	PSDHPRASTI	FLSKSQT DVR	300
301	EKRKSLFINH	HPPGQIARKY	SSCSTIFLDD	STVSQPNLKY	TIKCVALAIY	YHIKNRDPDG	360
361	RMLLDIFDEN	LHPLSKSEVP	PDYDKHNPEQ	KQIYRFVRTL	FSAAQLTAE	AIVTLVYLER	420
421	LLTYAEIDIC	PANWKRIVLG	AILLASKVWD	DQAVWNVDYC	QILKDITVED	MNELERQFLE	480
481	LLQFNINVPS	SVYAKYYFDL	RSLAEANNLS	FPLEPLSRER	AHKLEAISRL	CEDKYKDLRR	540
541	SARKRSASAD	NLTLPRWSPA	IIS				600