

ProQinase™ RB-CTF

RB transcriptional corepressor 1

Recombinant Protein Kinase Substrate

HGNC Symbol: RB1

Synonyms: OSRC, P105-RB, PP110, RB

Product No.: 0040-0000-6

Lot: 021

Description: Human RB, C-terminal fragment, amino acids S₇₇₃-K₉₂₈ (as in [NCBI/Protein](#) entry NP_000312.1), N-terminal GST fusion protein with a factor Xa cleavage site, expressed in E.coli

Theoretical MW_{Fusion Protein}: 44,460 Da

Expression host: E.coli

Purification: GST-Affinity and Ion Exchange Chromatography

ATPase activity: In an ADP-Glo™ assay (Promega) with 10 μM ATP or 30 μM ATP, the ATP → ADP conversion within 30 min is below 3% at a concentration of 100 μg/ml substrate.

Detailed ATPase assay conditions on request

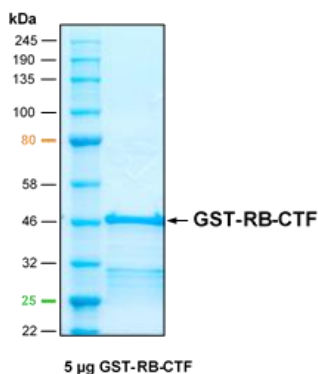
Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 10 % glycerol

Storage temperature: -80°C

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

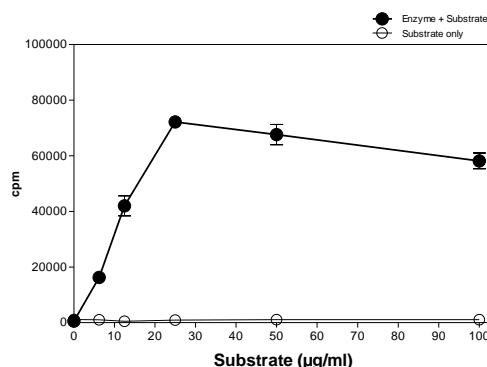
Protein concentration: 0.486 μg/μl (Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

RB-CTF Lot 021:
Coomassie stain



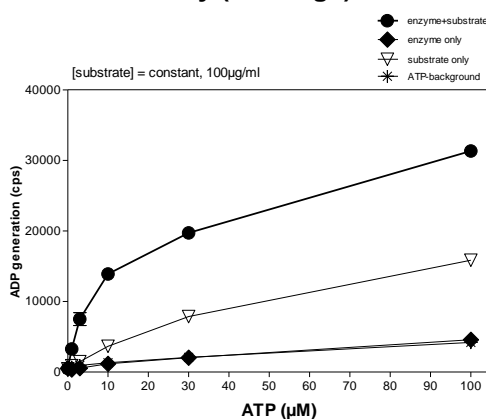
Phosphorylation of RB-CTF Lot021 by CDK4/CycD1

Radiometric filter binding assay



Assay conditions:
70 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}
ATP: 1 μM
Substrate: variable concentration
Kinase: 4 μg/ml
MSFC membrane (Millipore)

ADP-Glo™ assay (Promega)



Assay conditions:
70 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}
ATP: variable concentration
1 % (v/v) DMSO
Substrate: 100 μg/ml
Kinase: 4 μg/ml

This product was manufactured at Reaction Biology in Freiburg, Germany, and is for in vitro research use only, not for use in humans or animals.
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RB-CTF 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	WPLQG WQATF	GGGDHPPKSD	L IEGRG IRIP	RG STRPPTLS	240
241	PIPHIPRSPY	KFPSSPLRIP	GGNIYISPLK	SPYKISEGLP	TPTKMTPRSR	ILVSIGESFG	300
301	TSEKFQKINQ	MVCNSDRVLK	RSAEGSNPPK	PLKKLRFDIE	GSDEADGSKH	LPGESKFQQK	360
361	LAEMTSTRTR	MQKQKMND SM	DTSNKEEK				420

1-218: GST **Pink**: Factor Xa cleavage site **blue**: RB1 fragment