

Datasheet for ABIN7553302

CDK12 Protein (AA 1-1490) (His tag)



Overview

Quantity:	1 mg
Target:	CDK12 (CRKRS)
Protein Characteristics:	AA 1-1490
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CDK12 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat CDK12 Protein expressed in mammalien cells.
Sequence:	MPNSERHGGK KDGSGGASGT LQPSSGGGSS NSRERHRLVS KHKRHKSKHS KDMGLVTPEA
	ASLGTVIKPL VEYDDISSDS DTFSDDMAFK LDRRENDERR GSDRSDRLHK HRHHQHRRSR
	DLLKAKQTEK EKSQEVSSKS GSMKDRISGS SKRSNEETDD YGKAQVAKSS SKESRSSKLH
	KEKTRKEREL KSGHKDRSKS HRKRETPKSY KTVDSPKRRS RSPHRKWSDS SKQDDSPSGA
	SYGQDYDLSP SRSHTSSNYD SYKKSPGSTS RRQSVSPPYK EPSAYQSSTR SPSPYSRRQR
	SVSPYSRRRS SSYERSGSYS GRSPSPYGRR RSSSPFLSKR SLSRSPLPSR KSMKSRSRSP
	AYSRHSSSHS KKKRSSSRSR HSSISPVRLP LNSSLGAELS RKKKERAAAA AAAKMDGKES
	KGSPVFLPRK ENSSVEAKDS GLESKKLPRS VKLEKSAPDT ELVNVTHLNT EVKNSSDTGK
	VKLDENSEKH LVKDLKAQGT RDSKPIALKE EIVTPKETET SEKETPPPLP TIASPPPPLP
	TTTPPPQTPP LPPLPPIPAL PQQPPLPPSQ PAFSQVPASS TSTLPPSTHS KTSAVSSQAN
	SQPPVQVSVK TQVSVTAAIP HLKTSTLPPL PLPPLLPGDD DMDSPKETLP SKPVKKEKEQ

RTRHLLTDLP LPPELPGGDL SPPDSPEPKA ITPPQQPYKK RPKICCPRYG ERRQTESDWG KRCVDKFDII GIIGEGTYGQ VYKAKDKDTG ELVALKKVRL DNEKEGFPIT AIREIKILRQ LIHRSVVNMK EIVTDKODAL DFKKDKGAFY LVFEYMDHDL MGLLESGLVH FSEDHIKSFM KQLMEGLEYC HKKNFLHRDI KCSNILLNNS GQIKLADFGL ARLYNSEESR PYTNKVITLW YRPPELLLGE ERYTPAIDVW SCGCILGELF TKKPIFQANL ELAQLELISR LCGSPCPAVW PDVIKLPYFN TMKPKKQYRR RLREEFSFIP SAALDLLDHM LTLDPSKRCT AEQTLQSDFL KDVELSKMAP PDLPHWQDCH ELWSKKRRRQ RQSGVVVEEP PPSKTSRKET TSGTSTEPVK NSSPAPPQPA PGKVESGAGD AIGLADITQQ LNQSELAVLL NLLQSQTDLS IPQMAQLLNI HSNPEMQQQL EALNQSISAL TEATSQQQDS ETMAPEESLK EAPSAPVILP SAEQTTLEAS STPADMQNIL AVLLSQLMKT QEPAGSLEEN NSDKNSGPQG PRRTPTMPQE EAAACPPHIL PPEKRPPEPP GPPPPPPPP LVEGDLSSAP QELNPAVTAA LLQLLSQPEA EPPGHLPHEH QALRPMEYST RPRPNRTYGN TDGPETGFSA IDTDERNSGP ALTESLVQTL VKNRTFSGSL SHLGESSSYQ GTGSVQFPGD QDLRFARVPL ALHPVVGQPF LKAEGSSNSV VHAETKLQNY GELGPGTTGA SSSGAGLHWG GPTQSSAYGK LYRGPTRVPP RGGRGRGVPY Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:	CDK12 (CRKRS)
Alternative Name:	CDK12 (CRKRS Products)
Background:	Cyclin-dependent kinase 12 (EC 2.7.11.22) (EC 2.7.11.23) (Cdc2-related kinase, arginine/serine-rich) (CrkRS) (Cell division cycle 2-related protein kinase 7) (CDC2-related protein kinase 7) (Cell division protein kinase 12) (hCDK12),FUNCTION: Cyclin-dependent kinase that phosphorylates the C-terminal domain (CTD) of the large subunit of RNA polymerase II (POLR2A), thereby acting as a key regulator of transcription elongation. Regulates the expression of genes involved in DNA repair and is required for the maintenance of genomic stability. Preferentially phosphorylates 'Ser-5' in CTD repeats that are already phosphorylated at 'Ser-7', but can also phosphorylate 'Ser-2'. Required for RNA splicing, possibly by phosphorylating SRSF1/SF2. Involved in regulation of MAP kinase activity, possibly leading to affect the response to estrogen inhibitors. {ECO:0000269 PubMed:11683387, ECO:0000269 PubMed:19651820, ECO:0000269 PubMed:20952539, ECO:0000269 PubMed:22012619, ECO:0000269 PubMed:24662513}.
Molecular Weight:	164.2 kDa
UniProt: Application Details	Q9NYV4
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months