

Datasheet for ABIN7553556
CTC1 Protein (AA 1-1217) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	CTC1
Protein Characteristics:	AA 1-1217
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CTC1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CTC1 Protein expressed in mammalian cells.
Sequence:	MAAGRAQVPS SEQAWLEDAQ VFIQKTLCPA VKEPNVQLTP LVIDCVKTVW LSQGRNQGST LPLSYSFVSV QDLKTHQRLP CSHLSWSSS AYQAWAQEAG PNGNPLPREQ LLLGLTLDL SADLEQECRN GSLYVRDNTG VLSCELIDLD LSWLGHLFLF PRWSYLPPAR WNSSGEGHLE LWDAPVPVFP LTISPGPVTP IPVLYPESAS CLLRLRNKLR GVQRNLAGSL VRLSALVKSK QKAYFILSLG RSHPAVTHVS IIVQVPAQLV WHRALRPGTA YVLTSLRVSK IRGQRQHVWM TSQSSRLLLL KPECVQELEL ELEGPLLEAD PKPLPMPNS EDKDPESLV RYSRLLSYSG AVTGVLNEPA GLYELDGQLG LCLAYQQFRG LRRVMRPGVC LQLQDVHLLQ SVGGGTRRPV LAPCLRGAVL LQFSRQKPG AHSSRQAYGA SLYEQLVWER QLGLPLYLWA TKALEELACK LCPHVLRRHQ FLQHSSPGSP SLGLQLLAPT LDLLAPPGSP VRNAHNEILE EPHHCPLQKY TRLQTPSSFP TLATLKEEGQ RKAWASFDPK ALLPLPEASY LPSCQLNRRL AWSWLCLLPS AFCPAQVLLG VLVASSHKGC LQLRDQSGSL PCLLLAKHSQ PLSDPRLIGC LVRAERFQLI VERDVRSSFP SWKELSM PGF IQKQARVYV QFFLADALIL PVPRPCLHSA TPSTPQTDPT

GPEGPHLGQS RLFLCHKEA LMKRNFVPP GASPEVPKPA LSFYVLGSWL GGTQRKEGTG
WGLPEPQGND DNDQKVHLIF FGSSVRWFEF LHPGQVYRLI APGPATPMLF EKDGGSSCISR
RPLELAGCAS CLTVQDNWTL ELESSQDIQD VLDANKSLPE SSLTDLLSDN FTDSLVSFSA
EILSRTLCEP LVASLWMKLG NTGAMRRCVK LTVALETAEC EFPPLHDVYI EDPHLPPSLG
LLPGARVHFS QLEKRVSRSH NVYCCFRSST YVQVLSFPPE TTISIPLPHI YLAELLQGGQ
SPFQATASCH IVSVFSLQLF WVCAYCTSIC RQGKCTRLGS TCPTQTAISQ AIIRLLVEDG
TAEAVVTCRN HHVAAALGLC PREWASLLDF VQVPGRVVLQ FAGPGAQLES SARVDEPMTM
FLWTLCTSPS VLRPIVLSFE LERKPSKIVP LEPPRLQRFQ CGELPFLTHV NPRLRLSCLS
IRESEYSSSL GILASSC **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.**

Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none">• Made to order protein - from design to production - by highly experienced protein experts.• Protein expressed in mammalian 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). <p>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.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>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.</p>
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	CTC1
Alternative Name:	CTC1 (CTC1 Products)

Target Details

Background:	<p>CST complex subunit CTC1 (Conserved telomere maintenance component 1) (HBV DNAPTP1-transactivated protein B),FUNCTION: Component of the CST complex proposed to act as a specialized replication factor promoting DNA replication under conditions of replication stress or natural replication barriers such as the telomere duplex. The CST complex binds single-stranded DNA with high affinity in a sequence-independent manner, while isolated subunits bind DNA with low affinity by themselves. Initially the CST complex has been proposed to protect telomeres from DNA degradation (PubMed:19854130). However, the CST complex has been shown to be involved in several aspects of telomere replication. The CST complex inhibits telomerase and is involved in telomere length homeostasis, it is proposed to bind to newly telomerase-synthesized 3' overhangs and to terminate telomerase action implicating the association with the ACD:POT1 complex thus interfering with its telomerase stimulation activity. The CST complex is also proposed to be involved in fill-in synthesis of the telomeric C-strand probably implicating recruitment and activation of DNA polymerase alpha (PubMed:22763445). The CST complex facilitates recovery from many forms of exogenous DNA damage, seems to be involved in the re-initiation of DNA replication at repaired forks and/or dormant origins (PubMed:25483097). Involved in telomere maintenance (PubMed:19854131, PubMed:22863775). Involved in genome stability (PubMed:22863775). May be involved in telomeric C-strand fill-in during late S/G2 phase (By similarity). {ECO:0000250 UniProtKB:Q5SUQ9, ECO:0000269 PubMed:19854130, ECO:0000269 PubMed:19854131, ECO:0000269 PubMed:22763445, ECO:0000269 PubMed:22863775, ECO:0000269 PubMed:25483097}.</p>
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Molecular Weight:	134.6 kDa
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UniProt:	Q2NKJ3
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Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Buffer:	The buffer composition is at the discretion of the manufacturer.
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Handling Advice:	Avoid repeated freeze-thaw cycles.
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Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months