

Datasheet for ABIN7563936 CTR9 Protein (AA 1-1173) (His tag)



Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | CTR9 |
| Protein Characteristics: | AA 1-1173 |
| Origin: | Mouse |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This CTR9 protein is labelled with His tag. |

Product Details

| Purpose: | Custom-made recombinant Ctr9 Protein expressed in mammalian cells. |
|-----------|--|
| Sequence: | MSRGSIEIPL RDTDEVIELD FDQLPEGDEV ISILKQEHTQ LHIWIALALE YYKQGKTEEF |
| | VKLLEAARID GNLDYRDHEK DQMTCLDTLA AYYVQQARKE KNKDNKKDLI TQATLLYTMA |
| | DKIIMYDQNH LLGRACFCLL EGDKMDQADA QFHFVLNQSP NNIPALLGKA CISFNKKDYR |
| | GALAYYKKAL RTNPGCPAEV RLGMGHCFVK LNKLEKARLA FSRALELNSK CVGALVGLAV |
| | LELNNKEADS IKNGVQLLSR AYTIDPSNPM VLNHLANHFF FKKDYSKVQH LALHAFHNTE |
| | VEAMQAESCY QLARSFHVQE DYDQAFQYYY QATQFASSSF VLPFFGLGQM YIYRGDKENA |
| | SQCFEKVLKA YPNNYETMKI LGSLYAASED QEKRDIAKGH LKKVTEQYPD DVEAWIELAQ |
| | ILEQTDIQGA LSAYGTATRI LQEKVQADVP PEILNNVGAL HFRLGNLGEA KKYFLASLDR |
| | AKAEAEHDEH YYNAISVTTS YNLARLYEAM CEFHEAEKLY KNILREHPNY VDCYLRLGAM |
| | ARDKGNFYEA SDWFKEALQI NQDHPDAWSL IGNLHLAKQE WGPGQKKFER ILKQPATQSD |
| | TYSMLALGNV WLQTLHQPTR DREKEKRHQD RALAIYKQVL RNDAKNLYAA NGIGAVLAHK |
| | GYFREARDVF AQVREATADI SDVWLNLAHI YVEQKQYISA VQMYENCLRK FYKHQNTEVV |

LYLARALFKC GKLQECKQTL LKARHVAPSD TVLMFNVALV LQRLATSVLK DEKSNLKEVL
NAVKELELAH RYFSYLSKVG DKMRFDLALA ASEARQCSDL LSQAQYHVAR ARKQDEEERE
LRAKQEQEKE LLRQKLLKEQ EEKRLREKEE QKKLLEQRAQ YVEKTKNILM FTGETEATKE
KKRGGGGGRR SKKGGEFDEF VNDDTDDDLP VSKKKKRRKG SGSEQEGEEE EGGERKKKRR
RRPPKGEEGS EEEETENGPK PKKRRPPRAE KKKAPKPERL PPSMKGKIKS KAIISSSDDS
SDEDKLKIAD EGHPRNSNSD SDDDERPNRR ASSESDSDDN QNKSGSEAGS PRRSGRQESD
EDSDSDQPSR KRRRSGSEQS DNESVQSGRS PSGASENEND SRPASPSAES DHESEQGSDN
EGSGQGSGNE SEPEGSNNEA SDRGSEHGSD DSD 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.

If you are looking for a specific domain and are interested in a partial protein or a different

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:

Key Benefits:

- 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).

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target: CTR9

Alternative Name: Ctr9 (CTR9 Products)

Background:

RNA polymerase-associated protein CTR9 homolog (SH2 domain-binding protein 1) (Tetratricopeptide repeat-containing, SH2-binding phosphoprotein of 150 kDa) (TPR-containing, SH2-binding phosphoprotein of 150 kDa) (p150TSP), FUNCTION: Component of the PAF1 complex (PAF1C) which has multiple functions during transcription by RNA polymerase II and is implicated in regulation of development and maintenance of embryonic stem cell pluripotency. PAF1C associates with RNA polymerase II through interaction with POLR2A CTD non-phosphorylated and 'Ser-2'- and 'Ser-5'-phosphorylated forms and is involved in transcriptional elongation, acting both independently and synergistically with TCEA1 and in cooperation with the DSIF complex and HTATSF1. PAF1C is required for transcription of Hox and Wnt target genes. PAF1C is involved in hematopoiesis and stimulates transcriptional activity of KMT2A/MLL1. PAF1C is involved in histone modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4' (H3K4me3). PAF1C recruits the RNF20/40 E3 ubiquitin-protein ligase complex and the E2 enzyme UBE2A or UBE2B to chromatin which mediate monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1), UB2A/B-mediated H2B ubiquitination is proposed to be coupled to transcription. PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors. Required for monoand trimethylation on histone H3 'Lys-4' (H3K4me3) and dimethylation on histone H3 'Lys-79' (H3K4me3). Required for Hox gene transcription (By similarity). Required for the trimethylation of histone H3 'Lys-4' (H3K4me3) on genes involved in stem cell pluripotency, this function is synergistic with CXXC1 indicative for an involvement of the SET1 complex. Involved in transcriptional regulation of IL6-responsive genes and in JAK-STAT pathway, may regulate DNA-association of STAT3. {ECO:0000250|UniProtKB:Q6PD62, ECO:0000269|PubMed:17911113, ECO:0000269|PubMed:19345177}.

| Molecular Weight: | 133.4 kDa |
|-------------------|--|
| UniProt: | Q62018 |
| Pathways: | Cellular Response to Molecule of Bacterial Origin, Stem Cell Maintenance |

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.

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 |