Datasheet for ABIN7552744

BRD4 Protein (AA 1-1362) (His tag)

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Overview

Quantity:	1 mg
Target:	BRD4
Protein Characteristics:	AA 1-1362
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BRD4 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat BRD4 Protein expressed in mammalien cells.
Sequence:	MSAESGPGTR LRNLPVMGDG LETSQMSTTQ AQAQPQPANA ASTNPPPPET SNPNKPKRQT NQLQYLLRVV LKTLWKHQFA WPFQQPVDAV KLNLPDYYKI IKTPMDMGTI KKRLENNYYW NAQECIQDFN TMFTNCYIYN KPGDDIVLMA EALEKLFLQK INELPTEETE IMIVQAKGRG RGRKETGTAK PGVSTVPNTT QASTPPQTQT PQPNPPPVQA TPHPFPAVTP DLIVQTPVMT VVPPQPLQTP PPVPPQPQPP PAPAPQPVQS HPPIIAATPQ PVKTKKGVKR KADTTTPTTI DPIHEPPSLP PEPKTTKLGQ RRESSRPVKP PKKDVPDSQQ HPAPEKSSKV SEQLKCCSGI LKEMFAKKHA AYAWPFYKPV DVEALGLHDY CDIIKHPMDM STIKSKLEAR EYRDAQEFGA DVRLMFSNCY KYNPPDHEVV AMARKLQDVF EMRFAKMPDE PEEPVVAVSS PAVPPPTKVV APPSSSDSSS DSSSDSDSST DDSEEERAQR LAELQEQLKA VHEQLAALSQ PQQNKPKKKE KDKKEKKKEK HKRKEEVEEN KKSKAKEPPP KKTKKNNSSN SNVSKKEPAP MKSKPPPTYE SEEEDKCKPM SYEEKRQLSL DINKLPGEKL GRVVHIIQSR EPSLKNSNPD EIEIDFETLK

Product Details

	PSTLRELERY VTSCLRKKRK PQAEKVDVIA GSSKMKGFSS SESESSSESS SSDSEDSETE MAPKSKKKGH PGREQKKHHH HHHQQMQQAP APVPQQPPPP PQQPPPPPPP QQQQQPPPPP PPPSMPQQAA PAMKSSPPPF IATQVPVLEP QLPGSVFDPI GHFTQPILHL PQPELPPHLP QPPEHSTPPH LNQHAVVSPP ALHNALPQQP SRPSNRAAAL PPKPARPPAV SPALTQTPLL PQPPMAQPPQ VLLEDEEPPA PPLTSMQMQL YLQQLQKVQP PTPLLPSVKV QSQPPPPLPP PPHPSVQQQL QQQPPPPPPP QPQPPPQQQH QPPPRPVHLQ PMQFSTHIQQ PPPPQGQQPP HPPPGQQPPP PQPAKPQQVI QHHHSPRHHK SDPYSTGHLR EAPSPLMIHS PQMSQFQSLT HQSPPQQNVQ PKKQELRAAS VVQPQPLVVV KEEKIHSPII RSEPFSPSLR PEPPKHPESI KAPVHLPQRP EMKPVDVGRP VIRPPEQNAP PPGAPDKDKQ KQEPKTPVAP KKDLKIKNMG SWASLVQKHP TTPSSTAKSS SDSFEQFRRA AREKEEREKA LKAQAEHAEK EKERLRQERM RSREDEDALE QARRAHEEAR RRQEQQQQQR QEQQQQQQQQ AAAVAAAATP QAQSSQPQSM LDQQRELARK REQERRRREA MAATIDMNFQ SDLLSIFEEN LF **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:	BRD4

Target Details

Alternative Name:	BRD4 (BRD4 Products)
Background:	Bromodomain-containing protein 4 (Protein HUNK1),FUNCTION: Chromatin reader protein that recognizes and binds acetylated histones and plays a key role in transmission of epigenetic memory across cell divisions and transcription regulation (PubMed:23086925, PubMed:23317504, PubMed:20871596, PubMed:29176719). Remains associated with acetylated chromatin throughout the entire cell cycle and provides epigenetic memory for postmitotic G1 gene transcription by preserving acetylated chromatin status and maintaining high-order chromatin structure (PubMed:23589332, PubMed:23317504, PubMed:22334664). During interphase, plays a key role in regulating the transcription of signal-inducible genes by associating with the P-TEFb complex and recruiting it to promoters (PubMed:23589332, PubMed:19596240, PubMed:16109377, PubMed:16109376, PubMed:24360279). Also recruits P-TEFb complex to distal enhancers, so called anti-pause enhancers in collaboration with JMJD6 (PubMed:23589332, PubMed:19596240, PubMed:16109377, PubMed:16109376, PubMed:24360279). BRD4 and JMJD6 are required to form the transcriptionally active P-TEFb complex by displacing negative regulators such as HEXIM1 and 7SKsnRNA complex from P-TEFb, thereby transforming it into an active form that can then phosphorylate the C-terminal domain (CTD) of RNA polymerase II (PubMed:23589332, PubMed:19596240, PubMed:16109377, PubMed:16109376, PubMed:24360279). Regulates differentiation of naive CD4(+) T-cells into T-helper Th17 by promoting recruitment of P-TEFb to promoters (By similarity). Promotes phosphorylation of 'Ser-2' of the C-terminal domain (CTD) of RNA polymerase II (PubMed:23086925). According to a report, directly acts as an atypical protein kinase and mediates phosphorylation of 'Ser-2' of the C-terminal domain (CTD) of RNA polymerase II, these data however need additional evidences in vivo (PubMed:22509028). In addition to acetylated histones, also recognizes and binds acetylated RELA, leading to further recruitment of the P-TEFb complex and subsequent activation of NF-kappa-B (PubMed:19103749). Also acts as a regulator of p53/TP53-mediated transcription: following phosphorylation by CK2, recruited to p53/TP53 specific target promoters (PubMed:23317504). {ECO:0000250|UniProtKB:Q9ESU6, ECO:0000269|PubMed:16109376, ECO:0000269|PubMed:16109377, ECO:0000269|PubMed:19103749, ECO:0000269|PubMed:19596240, ECO:0000269|PubMed:22334664, ECO:0000269|PubMed:22509028, ECO:0000269|PubMed:23086925, ECO:0000269|PubMed:23317504, ECO:0000269|PubMed:23589332, ECO:0000269|PubMed:24360279, ECO:0000269|PubMed:29176719}., FUNCTION: [Isoform B]: Acts as a chromatin insulator in the DNA damage response pathway. Inhibits DNA damage response signaling by recruiting the condensin-2 complex to acetylated histones, leading to

Target Details

	chromatin structure remodeling, insulating the region from DNA damage response by limiting spreading of histone H2AX/H2A.x phosphorylation. {ECO:0000269|PubMed:23728299}.
Molecular Weight:	152.2 kDa
UniProt:	O60885
Pathways:	Chromatin Binding, SARS-CoV-2 Protein Interactome

Application Details

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

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