

# Datasheet for ABIN7565068 **BRD4 Protein (AA 1-1400) (His tag)**



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Quantity:	1 mg
Target:	BRD4
Protein Characteristics:	AA 1-1400
Origin:	Mouse
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)

Purpose:	Custom-made recombinat Brd4 Protein expressed in mammalien cells.
Sequence:	MSTESGPGTR LRNLPVMGDG LETSQMSTTQ AQAQPQPANA ASTNPPPPET SNPNKPKRQT
	NQLQYLLRVV LKTLWKHQFA WPFQQPVDAV KLNLPDYYKI IKTPMDMGTI KKRLENNYYW
	NAQECIQDFN TMFTNCYIYN KPGDDIVLMA EALEKLFLQK INELPTEETE IMIVQAKGRG
	RGRKETGAAK PGVSTVPNTT QASTSPQTQT PQQNPPPPVQ ATTHPFPAVT PDLIAQPPVM
	TMVPPQPLQT PSPVPPQPPP PPAPVPQPVQ SHPPIIATTP QPVKTKKGVK RKADTTTPTT
	IDPIHEPPSL APEPKTAKLG PRRESSRPVK PPKKDVPDSQ QHPGPEKSSK ISEQLKCCSG
	ILKEMFAKKH AAYAWPFYKP VDVEALGLHD YCDIIKHPMD MSTIKSKLES REYRDAQEFG
	ADVRLMFSNC YKYNPPDHEV VAMARKLQDV FEMRFAKMPD EPEEPVVTVS SPAVPPPTKV
	VAPPSSSDSS SDSSSDSDSS TDDSEEERAQ RLAELQEQLK AVHEQLAALS QPQQNKPKKK
	EKDKKEKKKE KHKKKEEVEE NKKSKTKELP PKKTKKNNSS NSNVSKKEPV PTKTKPPPTY
	ESEEEDKCKP MSYEEKRQLS LDINKLPGEK LGRVVHIIQS REPSLKNSNP DEIEIDFETL

KPSTLRELER YVTSCLRKKR KPQAEKVDVI AGSSKMKGFS SSESESTSES SSSDSEDSET
EMAPKSKKKG HTGRDQKKHH HHHHPQMQPA PAPVPQQPPP PPQQPPPPPP PQQQQQQPPP
PPPPPSMPQQ TAPAMKSSPP PFITAQVPVL EPQLPGSVFD PIGHFTQPIL HLPQPELPPH
LPQPPEHSTP PHLNQHAVVS PPALHNALPQ QPSRPSNRAA ALPPKPTRPP AVSPALAQPP
LLPQPPMAQP PQVLLEDEEP PAPPLTSMQM QLYLQQLQKV QPPTPLLPSV KVQSQPPPPL
PPPPHPSVQQ QQLQPQPPPP PPPQPQPPPQ QQHQPPPRPV HLPSMPFSAH IQQPPPPPGQ
QPTHPPPGQQ PPPPQPAKPQ QVIQHHPSPR HHKSDPYSAG HLREAPSPLM IHSPQMPQFQ
SLTHQSPPQQ NVQPKKQVKG RAEPQPPGPV MGQGQGCPPA SPAAVPMLSQ ELRPPSVVQP
QPLVVVKEEK IHSPIIRSEP FSTSLRPEPP KHPENIKAPV HLPQRPEMKP VDIGRPVIRP
PEQSAPPPGA PDKDKQKQEP KTPVAPKKDL KIKNMGSWAS LVQKHPTTPS STAKSSSDSF
EHFRRAAREK EEREKALKAQ AEHAEKEKER LRQERMRSRE DEDALEQARR AHEEARRQE
QQQQQQQRQ EQQQQQAA AVAAASAPQA QSSQPQSMLD QQRELARKRE QERRRREAMA
ATIDMNFQSD LLSIFEENLF 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

Alternative Name:	Brd4 (BRD4 Products)
Background:	Bromodomain-containing protein 4 (Mitotic chromosome-associated protein)
	(MCAP),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. 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:10938129). 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. Also
	recruits P-TEFb complex to distal enhancers, so called anti-pause enhancers in collaboration
	with JMJD6. 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 (By similarity). Regulates differentiation of naive CD4(+) T-cells into
	T-helper Th17 by promoting recruitment of P-TEFb to promoters (PubMed:28262505).
	Promotes phosphorylation of 'Ser-2' of the C-terminal domain (CTD) of RNA polymerase II
	(PubMed:16109376). 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. 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. Also acts as a regulator of p53/TP53-mediated
	transcription: following phosphorylation by CK2, recruited to p53/TP53 specific target
	promoters (By similarity). {ECO:0000250 UniProtKB:060885, ECO:0000269 PubMed:10938129,
	ECO:0000269 PubMed:16109376, ECO:0000269 PubMed:28262505}.
Molecular Weight:	155.9 kDa
UniProt:	Q9ESU6
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