

# Datasheet for ABIN7564182 **BRD2 Protein (AA 1-798) (His tag)**



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Quantity:	1 mg
Target:	BRD2
Protein Characteristics:	AA 1-798
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This BRD2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat Brd2 Protein expressed in mammalien cells.
Sequence:	MLQNVTPHKL PGEGNAGLLG LGPEAAAPGK RIRKPSLLYE GFESPTMASV PALQLAPANP
	PPPEVSNPKK PGRVTNQLQY LHKVVMKALW KHQFAWPFRQ PVDAVKLGLP DYHKIIKQPM
	DMGTIKRRLE NNYYWAASEC MQDFNTMFTN CYIYNKPTDD IVLMAQTLEK IFLQKVASMP
	QEEQELVVTI PKNSHKKGAK LAALQGSITS AHQVPAVSSV SHTALYTPPP EIPTTVLNIP
	HPSVISSPLL KSLHSAGPPL LAVSAAPPAQ PLAKKKGVKR KADTTTPTPT AILAPGSPAS
	PPGSLEPKAA RLPPMRRESG RPIKPPRKDL PDSQQQHQSS KKGKLSEQLK HCNGILKELL
	SKKHAAYAWP FYKPVDASAL GLHDYHDIIK HPMDLSTVKR KMENRDYRDA QEFAADVRLM
	FSNCYKYNPP DHDVVAMARK LQDVFEFRYA KMPDEPLEPG PLPVSTALPP GLTKSSSESS
	SEESSSESSS EEEEEEEEDE DEEESESSDS EEERAHRLAE LQEQLRAVHE QLAALSQGPI
	SKPKRKREKK EKKKKRKAEK HRGRIGIDED DKGPRAPRPP QPKKSKKAGG GGSNATTLSH
	PGFGTSGGSS NKLPKKSQKT APPVLPTGYD SEEEEESRPM SYDEKRQLSL DINKLPGEKL

GRVVHIIQAR EPSLRDSNPE EIEIDFETLK PSTLRELERY VLSCLRKKPR KPYTIRKPVG
KTKEELALEK KRELEKRLQD VSGQLNSTKK PPKKASEKTE SSAQQVAVSR LSASSSSSDS
SSSSSSSSS DTSDSDSG 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:	BRD2
Alternative Name:	Brd2 (BRD2 Products)
Background:	Bromodomain-containing protein 2 (Female sterile homeotic-related protein 1) (Fsrg-
	1),FUNCTION: Chromatin reader protein that specifically recognizes and binds histone H4

1),FUNCTION: Chromatin reader protein that specifically recognizes and binds histone H4 acetylated at 'Lys-5' and 'Lys-12' (H4K5ac and H4K12ac, respectively), thereby controlling gene expression and remodeling chromatin structures (PubMed:14731392). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (By similarity). Plays a key role in genome compartmentalization via its association with CTCF and cohesin: recruited to chromatin by CTCF and promotes formation of topologically associating domains (TADs) via its ability to bind acetylated histones,

contributing to CTCF boundary formation and enhancer insulation (PubMed:28388437). Also
recognizes and binds acetylated non-histone proteins, such as STAT3 (PubMed:28262505).
Involved in inflammatory response by regulating differentiation of naive CD4(+) T-cells into T-
helper Th17: recognizes and binds STAT3 acetylated at 'Lys-87', promoting STAT3 recruitment
to chromatin (PubMed:28262505). In addition to acetylated lysines, also recognizes and binds
lysine residues on histones that are both methylated and acetylated on the same side chain to
form N6-acetyl-N6-methyllysine (Kacme), an epigenetic mark of active chromatin associated
with increased transcriptional initiation (By similarity). Specifically binds histone H4 acetyl-
methylated at 'Lys-5' and 'Lys-12' (H4K5acme and H4K12acme, respectively) (By similarity).
{ECO:0000250 UniProtKB:P25440, ECO:0000269 PubMed:14731392,
ECO:0000269 PubMed:28262505, ECO:0000269 PubMed:28388437}.

Molecular Weight: 88.1 kDa

UniProt: Q7JJ13

Pathways: Chromatin Binding, SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

## **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:

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Liquid

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months