Datasheet for ABIN7552771

BRD2 Protein (AA 1-801) (His tag)

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Overview

Quantity:	1 mg
Target:	BRD2
Protein Characteristics:	AA 1-801
Origin:	Human
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:	MLQNVTPHNK LPGEGNAGLL GLGPEAAAPG KRIRKPSLLY EGFESPTMAS VPALQLTPAN PPPPEVSNPK KPGRVTNQLQ YLHKVVMKAL WKHQFAWPFR QPVDAVKLGL PDYHKIIKQP MDMGTIKRRL ENNYYWAASE CMQDFNTMFT NCYIYNKPTD DIVLMAQTLE KIFLQKVASM PQEEQELVVT IPKNSHKKGA KLAALQGSVT SAHQVPAVSS VSHTALYTPP PEIPTTVLNI PHPSVISSPL LKSLHSAGPP LLAVTAAPPA QPLAKKKGVK RKADTTTPTP TAILAPGSPA SPPGSLEPKA ARLPPMRRES GRPIKPPRKD LPDSQQQHQS SKKGKLSEQL KHCNGILKEL LSKKHAAYAW PFYKPVDASA LGLHDYHDII KHPMDLSTVK RKMENRDYRD AQEFAADVRL MFSNCYKYNP PDHDVVAMAR KLQDVFEFRY AKMPDEPLEP GPLPVSTAMP PGLAKSSSES SSEESSSESS SEEEEEEDEE DEEEEESESS DSEEERAHRL AELQEQLRAV HEQLAALSQG PISKPKRKRE KKEKKKKRKA EKHRGRAGAD EDDKGPRAPR PPQPKKSKKA SGSGGGSAAL GPSGFGPSGG SGTKLPKKAT KTAPPALPTG YDSEEEEESR PMSYDEKRQL SLDINKLPGE

Product Details

	KLGRVVHIIQ AREPSLRDSN PEEIEIDFET LKPSTLRELE RYVLSCLRKK PRKPYTIKKP VGKTKEELAL EKKRELEKRL QDVSGQLNST KKPPKKANEK TESSSAQQVA VSRLSASSSS SDSSSSSSSS SSSDTSDSDS G **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 (O27.1.1),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:18406326, PubMed:17848202, PubMed:17148447, PubMed:20709061, PubMed:20048151, PubMed:20871596). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed:28262505). Plays a key role in genome compartmentalization via its association with CTCF and cohesin: recruited to chromatin by CTCF and promotes formation of topologically

Target Details

	associating domains (TADs) via its ability to bind acetylated histones, contributing to CTCF boundary formation and enhancer insulation (PubMed:35410381). 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 (PubMed:37731000). Specifically binds histone H4 acetyl-methylated at 'Lys-5' and 'Lys-12' (H4K5acme and H4K12acme, respectively) (PubMed:37731000). {ECO:0000269|PubMed:17148447, ECO:0000269|PubMed:17848202, ECO:0000269|PubMed:18406326, ECO:0000269|PubMed:20048151, ECO:0000269|PubMed:20709061, ECO:0000269|PubMed:20871596, ECO:0000269|PubMed:28262505, ECO:0000269|PubMed:35410381, ECO:0000269|PubMed:37731000}.
Molecular Weight:	88.1 kDa
UniProt:	P25440
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:	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.

Handling

Expiry Date:	12 months