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BRD4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17153b

Specification

BRD4 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	O60885
Other Accession	Q9ESU6, NP_055114.1, NP_490597.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**1160-1188**

BRD4 Antibody (C-term) - Additional Information

Gene ID 23476

Other Names
Bromodomain-containing protein 4, Protein HUNK1, BRD4, HUNK1

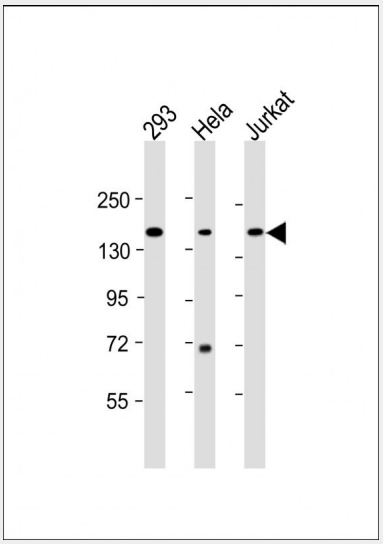
Target/Specificity
This BRD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1160-1188 amino acids from the C-terminal region of human BRD4.

Dilution
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
BRD4 Antibody (C-term) is for research use



All lanes : Anti-BRD4 Antibody (C-term) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 152 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

BRD4 Antibody (C-term) - Background

The protein encoded by this gene is homologous to the murine protein MCAP, which associates with chromosomes during mitosis, and to the human RING3 protein, a serine/threonine kinase. Each of these proteins contains two bromodomains, a conserved sequence motif which may be involved in chromatin targeting. This gene has been implicated as the chromosome 19 target of translocation t(15;19)(q13;p13.1), which defines an upper respiratory tract carcinoma in young people. Two alternatively spliced transcript variants have been

only and not for use in diagnostic or therapeutic procedures.

BRD4 Antibody (C-term) - Protein Information

Name BRD4

Synonyms 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. 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. 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 (PubMed:23589332, PubMed:19596240, PubMed:16109377, PubMed:16109376, PubMed:<a href="http://www.uniprot.org/ci

described. [provided by RefSeq].

BRD4 Antibody (C-term) - References

Reynoird, N., et al. EMBO J. 29(17):2943-2952(2010)
Dow, E.C., et al. J. Cell. Physiol. 224(1):84-93(2010)
Yan, J., et al. J. Virol. 84(1):76-87(2010)
Weidner-Glunde, M., et al. Front. Biosci. 15, 537-549 (2010) :
You, J., et al. Mol. Cell. Biol. 29(18):5094-5103(2009)

tations/24360279" target="_blank">24360279). 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).

Cellular Location
Nucleus. Chromosome Note=Associates with acetylated chromatin (PubMed:21890894, PubMed:16109376). Released from chromatin upon deacetylation of histones that can be triggered by different signals such as activation of the JNK pathway or nocodazole treatment (PubMed:21890894, PubMed:16109376). Preferentially localizes to mitotic chromosomes, while it does not localizes to meiotic chromosomes (PubMed:21890894, PubMed:16109376).

Tissue Location
Ubiquitously expressed.

BRD4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture