

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 IgG
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

E~~Use at an assay dependent concentration.

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 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 (PubMed:[20871596](#), PubMed:[23086925](#), PubMed:[23317504](#), PubMed:[29176719](#), PubMed:[29379197](#)). 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:[22334664](#), PubMed:[23317504](#), PubMed:[23589332](#)). 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:[16109376](#), PubMed:[16109377](#), PubMed:[19596240](#), PubMed:[23589332](#), PubMed:[24360279](#)). Also recruits P-TEFb complex to distal enhancers, so called anti-pause enhancers in collaboration with JMJD6 (PubMed:[16109376](#), PubMed:[16109377](#), PubMed:[19596240](#), PubMed:[23589332](#), 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:[16109376](#), PubMed:[16109377](#), PubMed:[19596240](#), PubMed:[23589332](#), 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](#)).

Cellular Location

Nucleus. Chromosome. Note=Associates with acetylated chromatin (PubMed:[16109376](#), PubMed:[21890894](#)). 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:[16109376](#), PubMed:[21890894](#)). Preferentially localizes to mitotic chromosomes, while it does not localize to meiotic chromosomes (PubMed:[16109376](#), PubMed:[21890894](#)).

Tissue Location

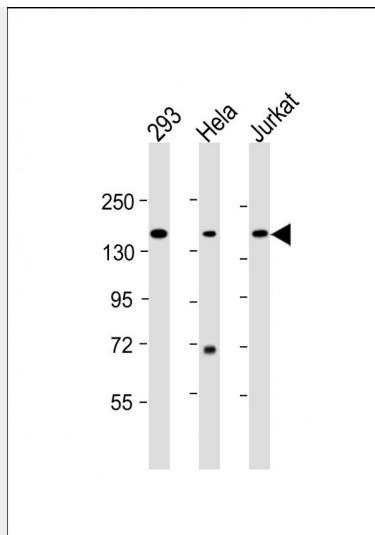
Ubiquitously expressed.

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 Cytometry](#)
- [Cell Culture](#)

BRD4 Antibody (C-term) - Images



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 described. [provided by RefSeq].

BRD4 Antibody (C-term) - References

Reyniord, 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) :
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