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BRD2 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10118

Product Information

Application	WB
Primary Accession	P25440
Other Accession	P25440, NP_005095, NM_005104
Reactivity	Human, Mouse, Rat, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	88061

Additional Information

Gene ID	6046
Alias Symbol	FSH, NAT, RNF3, FSRG1, RING3, D6S113E
Other Names	Bromodomain-containing protein 2, O2711, Really interesting new gene 3 protein, BRD2, KIAA9001, RING3
Target/Specificity	BRD2 is a mitogen-activated kinase which localizes to the nucleus. The gene maps to the major histocompatability complex (MHC) class II region on chromosome 6p21.3 but sequence comparison suggests that the protein is not involved in the immune response. Homology to the Drosophila gene female sterile homeotic suggests that this human gene may be part of a signal transduction pathway involved in growth control.
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-BRD2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	BRD2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BRD2 {ECO:0000303|PubMed:16227282, ECO:0000312|HGNC:HGNC:1103}
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

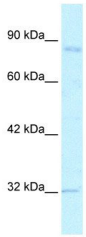
(PubMed:17148447, PubMed:17848202, PubMed:18406326, PubMed:20048151, PubMed:20709061, PubMed:20871596). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed:28262505). Plays a key role in genome compartmentalization via its association with CTCF and cohesin: recruited to chromatin by CTCF and promotes formation of topologically 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).

Cellular Location Nucleus. Chromosome Note=Detected on chromatin and nucleosomes

Background

This is a rabbit polyclonal antibody against BRD2. It was validated on Western Blot using a cell lysate as a positive control. Abgent strives to provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).

Images



BRD2 antibody - C-terminal region (AI10118) in Human Jurkat cells using Western Blot
WB Suggested Anti-BRD2 Antibody Titration: 2.5 µg/ml
ELISA Titer: 1:312500
Positive Control: Jurkat cell lysate
BRD2 is strongly supported by BioGPS gene expression data to be expressed in Human Jurkat cells