

BRD2 Antibody

Rabbit mAb Catalog # AP91988

Specification

BRD2 Antibody - Product Information

Application WB, IHC, FC, ICC

Primary Accession P25440
Clonality Monoclonal

Other Names

Brd2; FSH; FSRG1; NAT; O27.1.; RING3; RNF3;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 88061 Da

BRD2 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

BRD2

Description May play a role in spermatogenesis or

folliculogenesis.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

BRD2 Antibody - 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:<a href="http://www.uniprot.org/citations/35410381"

target="_blank">35410381). Also recognizes and binds acetylated non-histone proteins, such as STAT3 (PubMed:<a href="http://www.uniprot.org/citations/28262505"

target="_blank">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

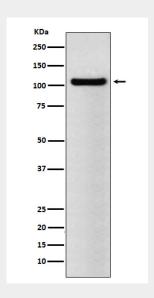
Nucleus. Chromosome Note=Detected on chromatin and nucleosomes

BRD2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

BRD2 Antibody - Images



Western blot analysis of BRD2 expression in NCCIT cell lysate.