

**BRD2 polyclonal antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11374****Specification**

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**BRD2 polyclonal antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P25440</a>
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	88061

**BRD2 polyclonal antibody - Additional Information****Gene ID** 6046

Positive Control	<b>Western blot: NIH3T3 cells, ELISA: peptides.</b>
Application & Usage	<b>Western Blot: 1:1000, ELISA: 1:100.</b>
<b>Other Names</b>	
FSRG1, NAT, RING3, RNF	

**Target/Specificity**  
BRD2**Antibody Form**  
Liquid**Appearance**  
Colorless liquid**Formulation**  
In PBS with 0.05% (W/V) sodium azide.**Handling**  
The antibody solution should be gently mixed before use.**Reconstitution & Storage**  
-20 °C**Background Descriptions****Precautions**  
BRD2 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.**BRD2 polyclonal 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:<a href="http://www.uniprot.org/citations/18406326" target="\_blank">18406326</a>, PubMed:<a href="http://www.uniprot.org/citations/17848202" target="\_blank">17848202</a>, PubMed:<a href="http://www.uniprot.org/citations/17148447" target="\_blank">17148447</a>, PubMed:<a href="http://www.uniprot.org/citations/20709061" target="\_blank">20709061</a>, PubMed:<a href="http://www.uniprot.org/citations/20048151" target="\_blank">20048151</a>, PubMed:<a href="http://www.uniprot.org/citations/20871596" target="\_blank">20871596</a>). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed:<a href="http://www.uniprot.org/citations/28262505" target="\_blank">28262505</a>). 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</a>). Also recognizes and binds acetylated non-histone proteins, such as STAT3 (PubMed:<a href="http://www.uniprot.org/citations/28262505" target="\_blank">28262505</a>). 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:<a href="http://www.uniprot.org/citations/28262505" target="\_blank">28262505</a>). 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:<a href="http://www.uniprot.org/citations/37731000" target="\_blank">37731000</a>). Specifically binds histone H4 acetyl-methylated at 'Lys-5' and 'Lys-12' (H4K5acme and H4K12acme, respectively) (PubMed:<a href="http://www.uniprot.org/citations/37731000" target="\_blank">37731000</a>).

### Cellular Location

Nucleus. Chromosome Note=Detected on chromatin and nucleosomes

### BRD2 polyclonal antibody - 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](#)

### BRD2 polyclonal antibody - Images

### BRD2 polyclonal antibody - Background

Brd2, a mitogen-activated kinase localized to the nucleus, is a putative transcriptional regulator which interacts with E2F1 and with histone H4 acetylated at 'Lys-13'. It is expressed during development and may be involved in growth control. Brd2 also may play a role in spermatogenesis

or folliculogenesis and may be involved in some types of leukemia and in juvenile myoclonic epilepsy.