

#### **BRD2** Rabbit mAb

**Catalog # AP75168** 

## **Specification**

#### **BRD2** Rabbit mAb - Product Information

**Application Primary Accession** Reactivity Host Clonality Calculated MW

**WB** P25440 Human, Rat Rabbit **Monoclonal Antibody** 88061

#### **BRD2** Rabbit mAb - Additional Information

**Gene ID** 6046

**Other Names** BRD2

Dilution WB~~1/500-1/1000

**Format** Liquid

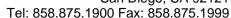
### **BRD2** Rabbit mAb - Protein Information

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/17148447" target=" blank">17148447</a>, PubMed:<a href="http://www.uniprot.org/citations/17848202" target=" blank">17848202</a>, PubMed:<a href="http://www.uniprot.org/citations/18406326" target=" blank">18406326</a>, PubMed:<a href="http://www.uniprot.org/citations/20048151" target="\_blank">20048151</a>, PubMed:<a href="http://www.uniprot.org/citations/20709061" target="blank">20709061</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"







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** Rabbit mAb - Protocols

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

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

# **BRD2** Rabbit mAb - Images

