

#### BRD3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8050b

#### Specification

# BRD3 Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P,E <u>Q15059</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 672-702

### **BRD3** Antibody (C-term) - Additional Information

Gene ID 8019

Other Names Bromodomain-containing protein 3, RING3-like protein, BRD3, KIAA0043, RING3L

Target/Specificity

This BRD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 672-702 amino acids from the C-terminal region of human BRD3.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

BRD3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## BRD3 Antibody (C-term) - Protein Information

Name BRD3 {ECO:0000303|PubMed:18406326, ECO:0000312|HGNC:HGNC:1104}

**Function** Chromatin reader that recognizes and binds acetylated histones, thereby controlling gene expression and remodeling chromatin structures (PubMed:<u>18406326</u>, PubMed:<u>32895492</u>, PubMed:<u>22464331</u>, PubMed:<u>27105114</u>). Recruits transcription factors and coactivators to target



gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed:<u>32895492</u>, PubMed:<u>29567837</u>). In vitro, binds acetylated lysine residues on the N-terminus of histone H2A, H2B, H3 and H4 (PubMed:<u>18406326</u>). Involved in endoderm differentiation via its association with long non-coding RNA (IncRNA) DIGIT: BRD3 undergoes liquid-liquid phase separation upon binding to IncRNA DIGIT, promoting binding to histone H3 acetylated at 'Lys-18' (H3K18ac) to induce endoderm gene expression (PubMed:<u>32895492</u>). Also binds non-histones acetylated proteins, such as GATA1 and GATA2: regulates transcription by promoting the binding of the transcription factor GATA1 to its targets (By similarity).

**Cellular Location** Nucleus. Chromosome. Note=Detected on chromatin

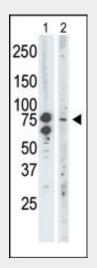
Tissue Location Ubiquitous..

## **BRD3 Antibody (C-term) - Protocols**

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

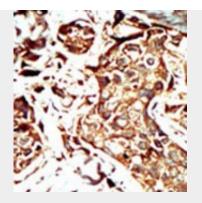
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

BRD3 Antibody (C-term) - Images



The anti-BRD3 Pab (Cat. #AP8050b) is used in Western blot to detect BRD3 in mouse brain tissue lysate (Lane 1) and Saos-2 cell lysate (Lane 2).





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

## BRD3 Antibody (C-term) - Background

This gene was identified based on its homology to the gene encoding the RING3 protein, a serine/threonine kinase. The gene localizes to 9q34, a region which contains several major histocompatibility complex (MHC) genes. The function of the encoded protein is not known.

### **BRD3 Antibody (C-term) - References**

Kaneko, H., et al., J Investig Allergol Clin Immunol 12(2):86-90 (2002). Thorpe, K.L., et al., Immunogenetics 44(5):391-396 (1996). Thorpe, K.L., et al., Gene 200 (1-2), 177-183 (1997). BRD3 Antibody (C-term) - Citations

• <u>The bromodomain protein inhibitor I-BET151 suppresses expression of inflammatory genes</u> <u>and matrix degrading enzymes in rheumatoid arthritis synovial fibroblasts.</u>