

# BRD3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8050b

## Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P, E           |
| Primary Accession | <a href="#">Q15059</a> |
| Reactivity        | Human, Mouse           |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Clone Names       | RB3471                 |
| Calculated MW     | 79542                  |
| Antigen Region    | 672-702                |

## 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~~1:100~500 E~~Use at an assay dependent concentration.                                                                                                                   |
| 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.                                                                                  |

## 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: <a href="#">18406326</a> , PubMed: <a href="#">22464331</a> , PubMed: <a href="#">27105114</a> , PubMed: <a href="#">32895492</a> ). Recruits transcription factors and coactivators to target |

gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed:[29567837](#), PubMed:[32895492](#)). In vitro, binds acetylated lysine residues on the N-terminus of histone H2A, H2B, H3 and H4 (PubMed:[18406326](#)). Involved in endoderm differentiation via its association with long non-coding RNA (lncRNA) DIGIT: BRD3 undergoes liquid-liquid phase separation upon binding to lncRNA DIGIT, promoting binding to histone H3 acetylated at 'Lys-18' (H3K18ac) to induce endoderm gene expression (PubMed:[32895492](#)). 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..

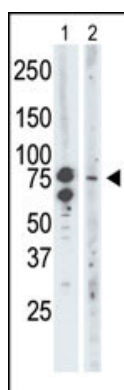
## Background

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.

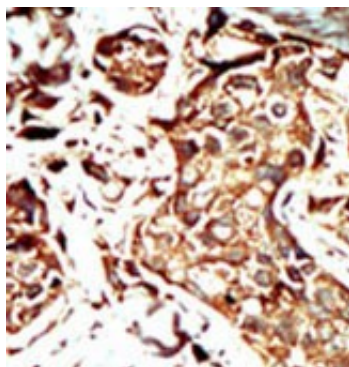
## References

Kaneko, H., et al., J Invest 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).

## 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.

## Citations

- [The bromodomain protein inhibitor I-BET151 suppresses expression of inflammatory genes and matrix degrading enzymes in rheumatoid arthritis synovial fibroblasts.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.