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BRD3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8050b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q15059
Reactivity	Human, Mouse
Predicted	Rat, Canine, Rabbit, Chicken
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:18406326, PubMed:22464331, PubMed:27105114,

PubMed:32895492). 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..

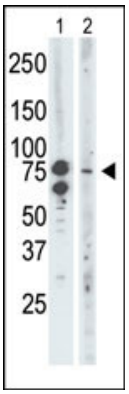
Background

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.

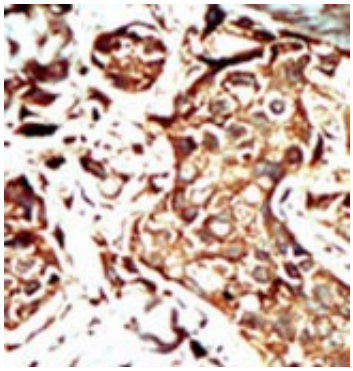
References

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

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'.