10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-BRD3 Antibody

Catalog # AP51019

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q15059
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79542

Additional Information

Gene ID	8019
Other Names	KIAA0043; RING3L; Bromodomain-containing protein 3; RING3-like protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human BRD3. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

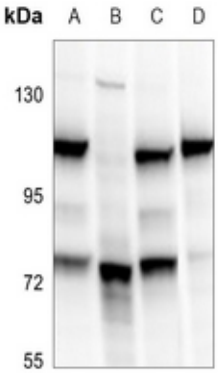
Name	BRD3 {ECO:0000303|PubMed:18406326, ECO:0000312|HGNC:HGNC:1104}
Function	Chromatin reader that recognizes and binds acetylated histones, thereby controlling gene expression and remodeling chromatin structures (PubMed:18406326, PubMed:22464331, PubMed:27105114, PubMed:32895492). Recruits transcription 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..

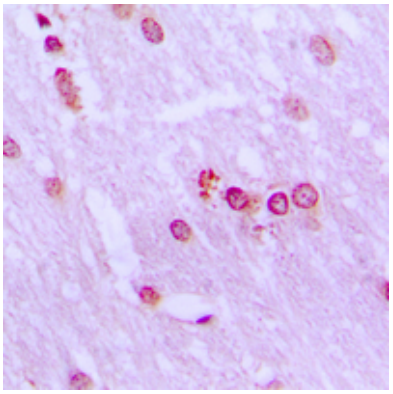
References

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Humphray S.J.,et al.Nature 429:369-374(2004).
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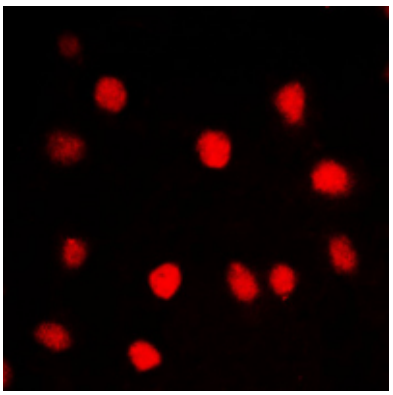
Images



Western blot analysis of BRD3 expression in SGC7901 (A), HEK293T (B), Jurkat (C), CT26 (D) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 110; 75 kD)



Immunohistochemical analysis of BRD3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of BRD3 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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