

BRD3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51019

Product Information

Application	WB
Primary Accession	<u>Q15059</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79542

Additional Information

Gene ID	8019
Other Names	Bromodomain-containing protein 3, RING3-like protein, BRD3, KIAA0043, RING3L
Target/Specificity	KLH conjugated synthetic peptide derived from human BRD3
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
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: <u>18406326</u> , PubMed: <u>22464331</u> , PubMed: <u>27105114</u> , PubMed: <u>32895492</u>). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed: <u>29567837</u> , PubMed: <u>32895492</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

Background

Binds hyperacetylated chromatin and plays a role in the regulation of transcription, probably by chromatin remodeling and interaction with transcription factors. Regulates transcription by promoting the binding of the transcription factor GATA1 to its targets (By similarity). Regulates transcription of the CCND1 gene.

References

Nomura N.,et al.DNA Res. 1:223-229(1994). Ishii H.,et al.DNA Cell Biol. 24:432-437(2005). Humphray S.J.,et al.Nature 429:369-374(2004). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Thorpe K.L.,et al.Gene 200:177-183(1997).

Images



Anti-BRD3 Antibody at 1:1000 dilution + A549 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 80 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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