

BRD3 Polyclonal Antibody

Catalog # AP68705

Product Information

Application	WB, IHC-P, IF
Primary Accession	<u>Q15059</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79542

Additional Information

Gene ID	8019
Other Names	BRD3; KIAA0043; RING3L; Bromodomain-containing protein 3; RING3-like protein
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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

Chromatin reader that recognizes and binds hyperacetylated chromatin and plays a role in the regulation of transcription, probably by chromatin remodeling and interaction with transcription factors (PubMed:<u>18406326</u>, PubMed:<u>27105114</u>). Regulates transcription by promoting the binding of the transcription factor GATA1 to its targets (By similarity).

Images



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