

BRD3-BD2 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11213**Specification**

BRD3-BD2 Antibody - Product Information

Application	WB
Primary Accession	Q15059
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	79542

BRD3-BD2 Antibody - Additional Information**Gene ID** 8019

Positive Control
Application & Usage
Other Names
KIAA0043, RING3L

Western Blot: Recombinant protein
Western blot: 1-4 µg/ml.

Target/Specificity
BRD3-BD2

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg or 30 µg (0.5 mg/ml) of antibody in PBS pH 7.2 containing 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
BRD3-BD2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BRD3-BD2 Antibody - 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:32895492, PubMed:22464331, PubMed:27105114). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed:32895492, PubMed:29567837). 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

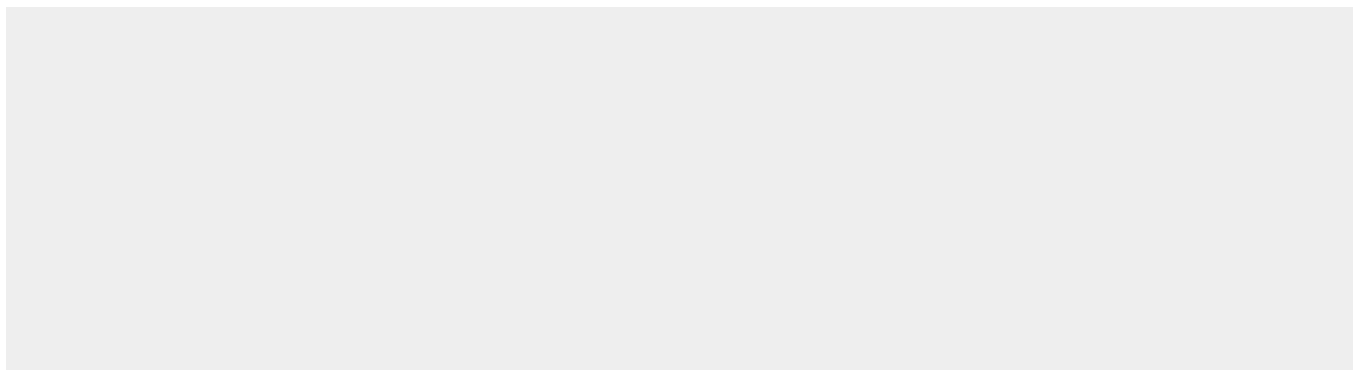
Ubiquitous..

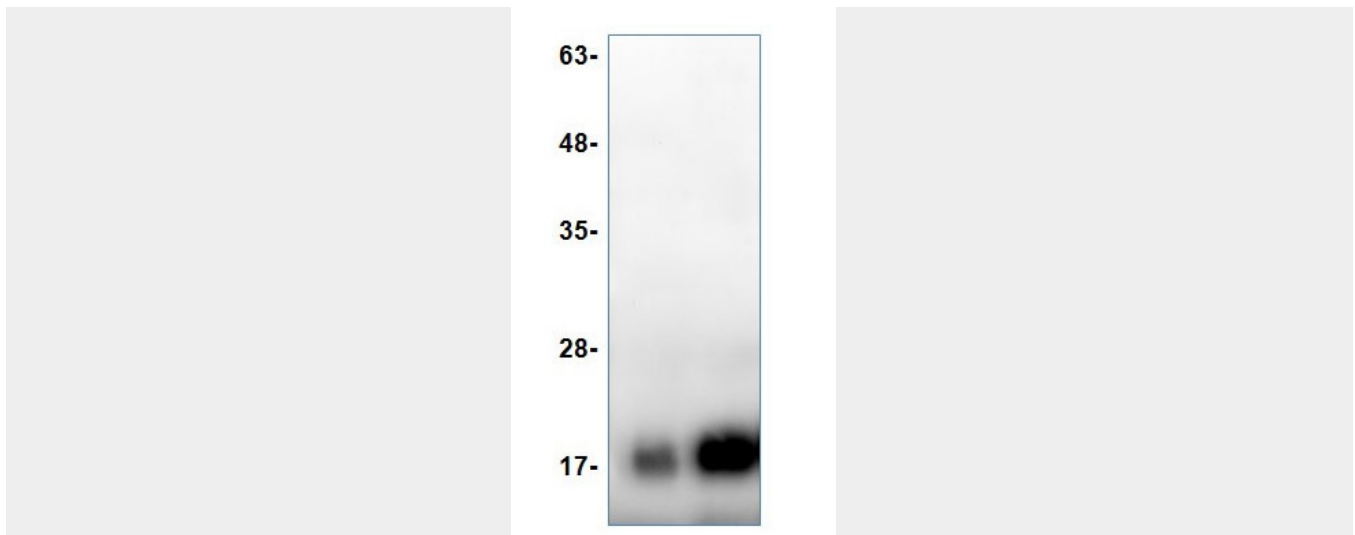
BRD3-BD2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BRD3-BD2 Antibody - Images





Western blot of BRD3-BD2 antibody. Lane 1: Recombinant protein 10 ng. Lane 2: Recombinant protein 50 ng

BRD3-BD2 Antibody - Background

The acetylation of histone lysine residues plays a crucial role in the epigenetic regulation of gene transcription. A bromodomain is a protein domain that recognizes acetylated lysine residues such as those on the N-terminal tails of histones. This recognition is often a prerequisite for protein-histone association and chromatin remodeling. These domains function in the linking of protein complexes to acetylated nucleosomes, thereby controlling chromatin structure and gene expression. Thus, bromodomains serve as “readers” of histone acetylation marks regulating the transcription of target promoters. BRD3 binds hyper-acetylated chromatin and plays a role in the regulation of transcription, probably by chromatin remodeling and interaction with transcription factors. It regulates transcription by promoting the binding of the transcription factor GATA1 to its targets and transcription of the CCND1 gene. A chromosomal aberration involving BRD3 was found in a rare, aggressive, and lethal carcinoma arising in midline organs of young people.