

BRD2 Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11623

Specification

BRD2 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB
O6MGA9
Human, Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
88051

BRD2 Antibody - Additional Information

Gene ID 294276

Other Names

RING3, RNF3; Bromodomain containing 4

Target/Specificity

BRD2

Formulation

 $100 \mu g$ (0.5 mg/ml) of antibody in PBS, 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol, pH 7.2

Handling

The antibody solution should be gently mixed before use.

Background Descriptions

Precautions

BRD2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BRD2 Antibody - Protein Information

Name Brd2

Synonyms Ring3

Function

Binds hyperacetylated chromatin and plays a role in the regulation of transcription, probably by chromatin remodeling. Regulates transcription of the CCND1 gene. Plays a role in nucleosome assembly (By similarity). May play a role in spermatogenesis or folliculogenesis (By similarity).

Cellular Location



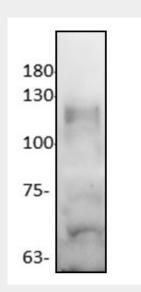
Nucleus. Note=Detected on chromatin and nucleosomes.

BRD2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BRD2 Antibody - Images



Western blot of 3T3 lysate with BRD2 Antibody.

BRD2 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. The BET family of proteins, defined by tandem Bromodomains and an Extra Terminal domain, include BRD2, BRD3, BRD4, and BRDT. The BET proteins play a key role in many cellular processes, including inflammatory gene expression, mitosis, and viral/host interactions. The isolated individual or tandem bromodomains of BRD2 and BRD4 have been shown to bind acetylated histone tails, serving to couple histone acetylation marks to the transcriptional regulation of target promoters. Small molecule inhibitors of these interactions hold promise as useful therapeutics for human disease.