

Anti-BRD2 Rabbit Monoclonal Antibody

Catalog # ABO15458

Specification

Anti-BRD2 Rabbit Monoclonal Antibody - Product Information

ApplicationWB, IHC, IF, ICC, FCPrimary AccessionP25440HostRabbitIsotypeIgGReactivityHumanClonalityMonoclonalFormatLiquidDescription

Anti-BRD2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

Anti-BRD2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 6046

Other Names Bromodomain-containing protein 2, O27.1.1, BRD2 {ECO:0000303|PubMed:16227282, ECO:0000312|HGNC:HGNC:1103}

Calculated MW 110 kDa KDa

Application Details WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:100

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human BRD2

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-BRD2 Rabbit Monoclonal Antibody - Protein Information

Name BRD2 {ECO:0000303|PubMed:16227282, ECO:0000312|HGNC:HGNC:1103}



Function

Chromatin reader protein that specifically recognizes and binds histone H4 acetylated at 'Lys-5' and 'Lys-12' (H4K5ac and H4K12ac, respectively), thereby controlling gene expression and remodeling chromatin structures (PubMed:17148447, PubMed:17848202, PubMed:18406326, PubMed:20048151, PubMed:20709061, PubMed:20871596). Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation (PubMed: 28262505). Plays a key role in genome compartmentalization via its association with CTCF and cohesin: recruited to chromatin by CTCF and promotes formation of topologically associating domains (TADs) via its ability to bind acetylated histones, contributing to CTCF boundary formation and enhancer insulation (PubMed: 35410381). Also recognizes and binds acetylated non-histone proteins, such as STAT3 (PubMed:28262505). Involved in inflammatory response by regulating differentiation of naive CD4(+) T-cells into T- helper Th17: recognizes and binds STAT3 acetylated at 'Lys-87', promoting STAT3 recruitment to chromatin (PubMed:28262505). In addition to acetylated lysines, also recognizes and binds lysine residues on histones that are both methylated and acetylated on the same side chain to form N6-acetyl-N6-methyllysine (Kacme), an epigenetic mark of active chromatin associated with increased transcriptional initiation (PubMed:37731000). Specifically binds histone H4 acetyl-methylated at 'Lys-5' and 'Lys-12' (H4K5acme and H4K12acme, respectively) (PubMed:37731000).

Cellular Location Nucleus. Chromosome Note=Detected on chromatin and nucleosomes

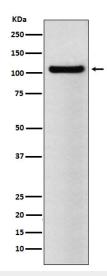
Anti-BRD2 Rabbit Monoclonal Antibody - Protocols

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

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

Anti-BRD2 Rabbit Monoclonal Antibody - Images





Western blot analysis of BRD2 expression in NCCIT cell lysate.