

# BRD2 Blocking Peptide

Catalog # PBV10506b

### Specification

## **BRD2 Blocking Peptide - Product Information**

Primary Accession	<u>Q6MGA9</u>
Gene ID	294276
Calculated MW	88051

### **BRD2 Blocking Peptide - Additional Information**

Gene ID 294276

Application & Usage

The peptide is used for blocking the antibody activity of BRD2. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

#### **Other Names** Bromodomain-containing protein 2, Protein RING3, Brd2, Ring3

Target/Specificity BRD2

Formulation 50  $\mu$ g (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage -20 °C

**Background Descriptions** 

**Precautions** BRD2 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

## **BRD2 Blocking Peptide - Protein Information**

Name Brd2

Synonyms Ring3

#### 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. Recruits transcription factors and coactivators to target gene sites, and activates RNA polymerase II machinery for transcriptional elongation. 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. Also recognizes and binds acetylated non-histone proteins, such as STAT3. 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. 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. Specifically binds histone H4 acetyl- methylated at 'Lys-5' and 'Lys-12' (H4K5acme and H4K12acme, respectively).

**Cellular Location** 

Nucleus {ECO:0000250|UniProtKB:P25440}. Chromosome {ECO:0000250|UniProtKB:P25440}. Note=Detected on chromatin and nucleosomes. {ECO:0000250|UniProtKB:P25440}

### **BRD2 Blocking Peptide - Protocols**

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

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

BRD2 Blocking Peptide - Images