

## **BARD1** Antibody

Rabbit Polyclonal Antibody Catalog # ABV10587

# **Specification**

## **BARD1 Antibody - Product Information**

Application WB, IP
Primary Accession Q99728
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 86648

# **BARD1 Antibody - Additional Information**

Gene ID 580

Application & Usage

Western blotting (1:500 - 1:2500) and Immunoprecipitation. HeLa nuclear extract can be used as a positive control. However, the optimal concentrations should be determined individually. The antibody recognizes the BARD1 of human origin. Reactivity to other species has not been tested.

Other Names BARD1, BARD-1

Target/Specificity BARD1

Antibody Form Liquid

**Appearance** Colorless liquid

# **Formulation**

 $100~\mu l$  affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

#### Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 



#### **Precautions**

BARD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **BARD1 Antibody - Protein Information**

#### Name BARD1

## **Function**

E3 ubiquitin-protein ligase. The BRCA1-BARD1 heterodimer specifically mediates the formation of 'Lys-6'-linked polyubiquitin chains and coordinates a diverse range of cellular pathways such as DNA damage repair, ubiquitination and transcriptional regulation to maintain genomic stability. Plays a central role in the control of the cell cycle in response to DNA damage. Acts by mediating ubiquitin E3 ligase activity that is required for its tumor suppressor function. Also forms a heterodimer with CSTF1/CSTF-50 to modulate mRNA processing and RNAP II stability by inhibiting pre-mRNA 3' cleavage.

#### **Cellular Location**

Nucleus. Note=During S phase of the cell cycle, colocalizes with BRCA1 into discrete subnuclear foci. Can translocate to the cytoplasm. Localizes at sites of DNA damage at double-strand breaks (DSBs); recruitment to DNA damage sites is mediated by the BRCA1-A complex

## **BARD1 Antibody - Protocols**

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

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

# **BARD1 Antibody - Images**

#### **BARD1 Antibody - Background**

Mutations within the BRCA1 gene, localized to chromosome 17q, are believed to account for approximately 45% of families with increased incidence of both early-onset breast cancer and ovarian cancer. The BRCA1 gene is expressed in numerous tissues, including breast and ovary, and encodes a predicted protein of 1863 amino acids. This protein contains a RING domain near the N-terminus and appears to encode a tumor suppressor. BARD1 (BRCA1-associated RING domain protein 1) and BAP1 (BRCA1-associated protein 1) have both been shown to bind to the N-terminus of BRCA1 and are potential mediators of tumor suppression. BARD1 contains an N-terminal RING domain and three tandem ankyrin repeats. The C-terminus of BARD1 contains a region with sequence homology to BRCA1, termed the BRCT domain. BAP1 is a ubiquitin hydrolase and has been shown to enhance BRCA1-mediated cell growth suppression.