

# BARD1 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP10664a

## **Specification**

# BARD1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>099728</u>

# BARD1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 580

#### **Other Names**

BRCA1-associated RING domain protein 1, BARD-1, 632-, BARD1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### BARD1 Antibody (N-term) Blocking peptide - 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 (N-term) Blocking peptide - Protocols

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



Tel: 858.875.1900 Fax: 858.875.1999

## • Blocking Peptides

# BARD1 Antibody (N-term) Blocking peptide - Images

# BARD1 Antibody (N-term) Blocking peptide - Background

BARD1 is a protein which interacts with the N-terminal region of BRCA1. In addition to its ability to bindBRCA1 in vivo and in vitro, it shares homology with the 2 mostconserved regions of BRCA1: the N-terminal RING motif and the C-terminal BRCT domain. The RING motif is a cysteine-rich sequencefound in a variety of proteins that regulate cell growth, including the products of tumor suppressor genes and dominant protooncogenes. This protein also contains 3 tandem ankyrin repeats. TheBARD1/BRCA1 interaction is disrupted by tumorigenic amino acidsubstitutions in BRCA1, implying that the formation of a stablecomplex between these proteins may be an essential aspect of BRCA1tumor suppression. This protein may be the target of oncogenicmutations in breast or ovarian cancer.

## BARD1 Antibody (N-term) Blocking peptide - References

Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Dizin, E., et al. Int. J. Biochem. Cell Biol. 42(5):693-700(2010)Irminger-Finger, J. Gynecol. Oncol. 117(2):211-215(2010)De Brakeleer, S., et al. Hum. Mutat. 31 (3), E1175-E1185 (2010):