

# BARD1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant BARD1. Catalog # AT1268a

## **Product Information**

Application	IF, E
Primary Accession	<u>Q99728</u>
Other Accession	<u>NM_000465</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2A11
Calculated MW	86648

## **Additional Information**

Gene ID	580
Other Names	BRCA1-associated RING domain protein 1, BARD-1, 632-, BARD1
Target/Specificity	BARD1 (NP_000456, 658 a.a. ~ 757 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	BARD1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### Background

This gene encodes a protein which interacts with the N-terminal region of BRCA1. In addition to its ability to bind BRCA1 in vivo and in vitro, it shares homology with the 2 most conserved regions of BRCA1: the N-terminal RING motif and the C-terminal BRCT domain. The RING motif is a cysteine-rich sequence found 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. The BARD1/BRCA1 interaction is disrupted by tumorigenic amino acid substitutions in BRCA1, implying that the formation of a stable complex between these proteins may be an essential aspect of BRCA1 tumor suppression. This protein may be the target of oncogenic mutations in breast or ovarian cancer.

## References

A Large-scale genetic association study of esophageal adenocarcinoma risk. Liu CY, et al. Carcinogenesis, 2010 Jul. PMID 20453000.Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.BRD7, a subunit of SWI/SNF complexes, binds directly to BRCA1 and regulates BRCA1-dependent transcription. Harte MT, et al. Cancer Res, 2010 Mar 15. PMID 20215511.Cancer predisposing missense and protein truncating BARD1 mutations in non-BRCA1 or BRCA2 breast cancer families. De Brakeleer S, et al. Hum Mutat, 2010 Mar. PMID 20077502.Negative feedback loop of BRCA1-BARD1 ubiquitin ligase on estrogen receptor alpha stability and activity antagonized by cancer-associated isoform of BARD1. Dizin E, et al. Int J Biochem Cell Biol, 2010 May. PMID 20060929.

### Images

02 0.01

0.1

1

Recombinant Prote & Concentration (kg/m)

10

100

1000



Immunofluorescence of monoclonal antibody to BARD1 on HeLa cell . [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged BARD1 is approximately 3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.