

For Research Use Only

# BRCA1 Polyclonal antibody

Catalog Number: 20649-1-AP

16 Publications



## Basic Information

<b>Catalog Number:</b> 20649-1-AP	<b>GenBank Accession Number:</b> NM_007294	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 387 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 672	
<b>Source:</b> Rabbit	<b>Full Name:</b> breast cancer 1, early onset	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 208 kDa	
	<b>Observed MW:</b> 230-260 kDa	

## Applications

**Tested Applications:**  
ELISA

**Cited Applications:**  
IF, IHC, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, rat, mouse

## Background Information

BRCA1, also named as RNF53, plays a central role in DNA repair by facilitating cellular response to DNA damage. It is required for appropriate cell cycle arrests after ionizing irradiation in both the S-phase and the G2 phase of the cell cycle. The BRCA1-BARD1 heterodimer coordinates a diverse range of cellular pathways such as DNA damage repair, ubiquitination and transcriptional regulation to maintain genomic stability. BRCA1 acts by mediating ubiquitin E3 ligase activity that is required for its tumor suppressor function. It is involved in transcriptional regulation of P21 in response to DNA damage. BRCA1 is required for FANCD2 targeting to sites of DNA damage. It may function as a transcriptional regulator. BRCA1 inhibits lipid synthesis by binding to inactive phosphorylated ACACA and preventing its dephosphorylation. The antibody is specific to BRCA1. BRCA1 appears to produce multiple splice variants. BRCA1 is a nuclear protein with a molecular mass of 220 kDa. The present study describes the isolation and expression of two cDNAs of BRCA1, including a splice variant designated BRCA1D672-4095. BRCA1D672-4095 is generated by exclusion of exon 11 by in-frame splicing and produces a 97 kDa protein. In contrast to BRCA1, BRCA1D672-4095 localizes to the cytoplasm.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yang Yu	31636387	Oncogene	IF
Xiaoyue Zhang	34729106	J Cancer	WB
Suchismita Panda	30296263	PLoS Biol	WB

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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## Selected Validation Data