

# BRCA1 Monoclonal antibody

Catalog Number: 66267-1-Ig 1 Publications

## Basic Information

Catalog Number:	66267-1-Ig	GenBank Accession Number:	BC115037	Purification Method:	Protein G purification
Size:	1000 µg/ml	GeneID (NCBI):	672	CloneNo.:	20D7G6
Source:	Mouse	UNIPROT ID:	P38398		
Isotype:	IgG1	Full Name:	breast cancer 1, early onset		
Immunogen Catalog Number:	AG19178	Calculated MW:	1863 aa, 208 kDa		
		Observed MW:	207 kDa		

## Applications

Tested Applications:  
ELISA

Cited Applications:  
IF

Species Specificity:  
human

Cited Species:  
human

## Background Information

BRCA1, also named as RNF53, plays a central role in DNA repair by facilitating cellular response to DNA repair. 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

## 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

