

For Research Use Only

# BRCA1 Recombinant antibody

Catalog Number:83390-6-RR



## Basic Information

<b>Catalog Number:</b> 83390-6-RR	<b>GenBank Accession Number:</b> BC115037	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 672	<b>CloneNo.:</b> 240285E10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P38398	<b>Recommended Dilutions:</b> WB 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> breast cancer 1, early onset	
<b>Immunogen Catalog Number:</b> AG17946	<b>Calculated MW:</b> 1863 aa, 208 kDa	
	<b>Observed MW:</b> 300 kDa	

## Applications

<b>Tested Applications:</b> WB, FC (Intra), ELISA	<b>Positive Controls:</b> WB : HeLa cells, MCF-7 cells, HEK-293 cells, MDA-MB-231 cells, T-47D cells
<b>Species Specificity:</b> 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.

## Storage

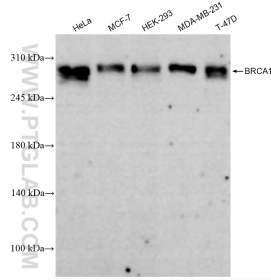
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

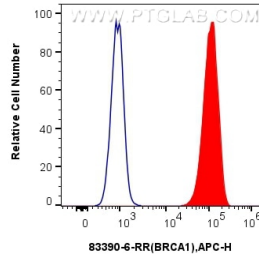
For technical support and original validation data for this product please contact:  
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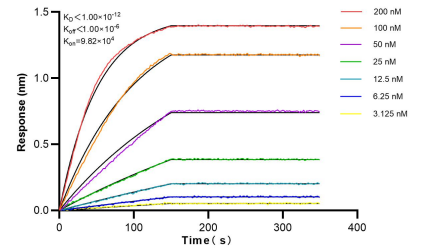
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 83390-6-RR (BRCA1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



1x10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.25 ug BRCA1 Recombinant antibody (83390-6-RR, Clone:240285E10) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 83390-6-RR against Human BRCA1 were performed. The affinity constant is below 1 pM.