

**Product Name: BRCA1 Rabbit Polyclonal Antibody****Catalog #: APRab03393**

For research use only.

**Summary**

|                      |                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------|
| <b>Description</b>   | Rabbit polyclonal Antibody                                                                     |
| <b>Host</b>          | Rabbit                                                                                         |
| <b>Application</b>   | WB,IHC,ICC/IF,ELISA                                                                            |
| <b>Reactivity</b>    | Human,Rat                                                                                      |
| <b>Conjugation</b>   | Unconjugated                                                                                   |
| <b>Modification</b>  | Unmodified                                                                                     |
| <b>Isotype</b>       | IgG                                                                                            |
| <b>Clonality</b>     | Polyclonal                                                                                     |
| <b>Form</b>          | Liquid                                                                                         |
| <b>Concentration</b> | 1mg/ml                                                                                         |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.                    |
| <b>Shipping</b>      | Ice bags                                                                                       |
| <b>Buffer</b>        | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% sodium azide, pH 7.3. |
| <b>Purification</b>  | Affinity Purification                                                                          |

**Application**

|                         |                                                                       |
|-------------------------|-----------------------------------------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:500-1:1000,IHC 1:50-1:100,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000 |
| <b>Molecular Weight</b> | Calculated MW: 208 kDa; Observed MW: 208 kDa                          |

**Antigen Information**

|                          |                                                                                   |
|--------------------------|-----------------------------------------------------------------------------------|
| <b>Gene Name</b>         | BRCA1                                                                             |
| <b>Alternative Names</b> | BRCA1; RNF53; Breast cancer type 1 susceptibility protein; RING finger protein 53 |
| <b>Gene ID</b>           | 672                                                                               |
| <b>SwissProt ID</b>      | P38398                                                                            |
| <b>Immunogen</b>         | A synthetic peptide of human BRCA1                                                |

**Background**

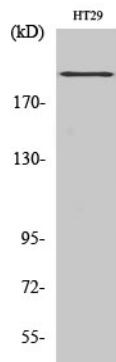
E3 ubiquitin-protein ligase that specifically mediates the formation of 'Lys-6'-linked polyubiquitin chains and plays a central role in DNA repair by facilitating cellular responses to DNA damage. It is unclear whether it also mediates the formation of

other types of polyubiquitin chains. The E3 ubiquitin-protein ligase activity is required for its tumor suppressor function. The BRCA1-BARD1 heterodimer coordinates a diverse range of cellular pathways such as DNA damage repair, ubiquitination and transcriptional regulation to maintain genomic stability. Regulates centrosomal microtubule nucleation. Required for normal cell cycle progression from G2 to mitosis. Required for appropriate cell cycle arrests after ionizing irradiation in both the S-phase and the G2 phase of the cell cycle. Involved in transcriptional regulation of P21 in response to DNA damage. Required for FANCD2 targeting to sites of DNA damage. May function as a transcriptional regulator. Inhibits lipid synthesis by binding to inactive phosphorylated ACACA and preventing its dephosphorylation. Contributes to homologous recombination repair (HRR) via its direct interaction with PALB2, fine-tunes recombinational repair partly through its modulatory role in the PALB2-dependent loading of BRCA2-RAD51 repair machinery at DNA breaks. Component of the BRCA1-RBBP8 complex which regulates CHEK1 activation and controls cell cycle G2/M checkpoints on DNA damage via BRCA1-mediated ubiquitination of RBBP8. Acts as a transcriptional activator (PubMed:20160719).

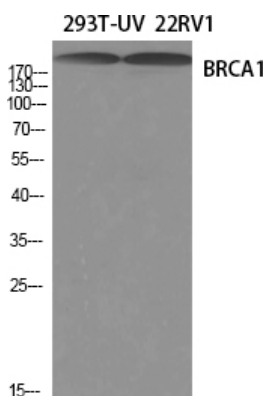
## Research Area

Epigenetics and Nuclear Signaling

## Image Data



Western blot analysis of BRCA1 in HT-29 lysates using BRCA1 antibody.



Western blot analysis of BRCA1 in 293TUV 22RV1 lysates using BRCA1 antibody.