### For Research Use Only

# BRCA1 Polyclonal antibody

Catalog Number: 20649-1-AP

16 Publications



**Basic Information** 

Catalog Number: 20649-1-AP

Size:

390 μg/ml

Source: Rabbit Isotype:

IgG

GenBank Accession Number:

NM\_007294

GeneID (NCBI):

672

UNIPROT ID: P38398 Full Name:

breast cancer 1, early onset

Calculated MW: 208 kDa Observed MW: 230-260 kDa **Purification Method:** 

Antigen affinity purification

## **Applications**

**Tested Applications:** 

ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat Cited Species:

human, rat, mouse

# **Background Information**

RCA1, 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          |
| 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 Buffe

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data