

## BRCA1 Polyclonal antibody

Catalog Number: 22362-1-AP

Featured Product

58 Publications

## Basic Information

## Catalog Number:

22362-1-AP

## Source:

Rabbit

## Isotype:

IgG

## Immunogen Catalog Number:

AG17946

## GenBank Accession Number:

BC115037

## GeneID (NCBI):

672

## UNIPROT ID:

P38398

## Full Name:

breast cancer 1, early onset

## Calculated MW:

1863 aa, 208 kDa

## Observed MW:

300 kDa

## Purification Method:

Antigen affinity purification

## Recommended Dilutions:

WB: 1:1000-1:4000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:500-1:2000

## Applications

## Tested Applications:

WB, IP, IHC, ELISA

## Cited Applications:

WB, IHC, IF, IP, ChIP

## Species Specificity:

human, mouse, rat

## Cited Species:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Positive Controls:

WB: MCF-7 cells,

IP: MCF-7 cells,

IHC: human ovary tumor tissue, human breast cancer tissue, rat testis tissue, mouse testis tissue, human lung cancer tissue

## 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
X Bian	28945226	Oncogene	WB, IHC
Limei Ji	34455779	J Med Chem	WB
Jingyuan Sun	33087136	J Exp Clin Cancer Res	WB

## Storage

## Storage:

Store at -20°C. Stable for one year after shipment.

## Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

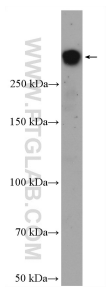
For technical support and original validation data for this product please contact:

T: 4006900926

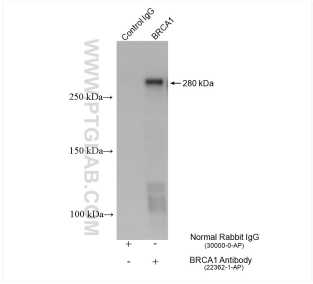
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

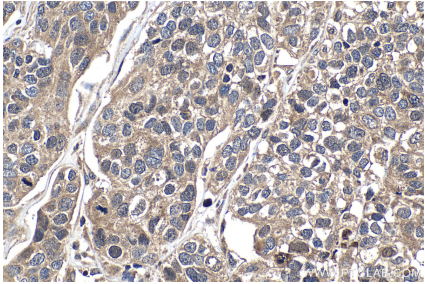
Selected Validation Data



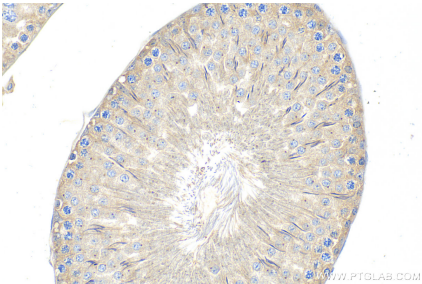
MCF-7 cells were subjected to SDS PAGE followed by western blot with 22362-1-AP (BRCA1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



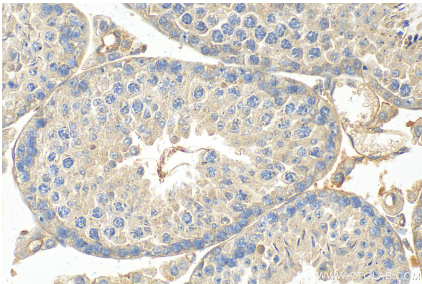
IP result of anti-BRCA1 (IP:22362-1-AP, 4ug; Detection:22362-1-AP 1:6000) with MCF-7 cells lysate 760 ug.



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 22362-1-AP (BRCA1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat testis tissue slide using 22362-1-AP (BRCA1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 22362-1-AP (BRCA1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).