

**BRCA1 (phospho Ser1423) Polyclonal Antibody**

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| <b>Catalog No :</b>          | YP0038   |
| <b>Reactivity :</b>          | Human;Rat  |
| <b>Applications :</b>        | WB;IHC;IF;ELISA  |
| <b>Target :</b>              | BRCA1  |
| <b>Fields :</b>              | >>Platinum drug resistance;>>Homologous recombination;>>Fanconi anemia pathway;>>Ubiquitin mediated proteolysis;>>PI3K-Akt signaling pathway;>>MicroRNAs in cancer;>>Breast cancer |
| <b>Gene Name :</b>           | BRCA1  |
| <b>Protein Name :</b>        | Breast cancer type 1 susceptibility protein  |
| <b>Human Gene Id :</b>       | 672  |
| <b>Human Swiss Prot No :</b> | P38398   |
| <b>Mouse Swiss Prot No :</b> | P48754   |
| <b>Rat Gene Id :</b>         | 497672   |
| <b>Rat Swiss Prot No :</b>   | O54952   |
| <b>Immunogen :</b>           | The antiserum was produced against synthesized peptide derived from human BRCA1 around the phosphorylation site of Ser1423. AA range:1391-1440                                     |
| <b>Specificity :</b>         | Phospho-BRCA1 (S1423) Polyclonal Antibody detects endogenous levels of BRCA1 protein only when phosphorylated at S1423.  |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source :</b>              | Polyclonal, Rabbit,IgG   |
| <b>Dilution :</b>            | WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200  |

**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 210kD

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**Cell Pathway :** Ubiquitin mediated proteolysis;

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**Background :** This gene encodes a nuclear phosphoprotein that plays a role in maintaining genomic stability, and it also acts as a tumor suppressor. The encoded protein combines with other tumor suppressors, DNA damage sensors, and signal transducers to form a large multi-subunit protein complex known as the BRCA1-associated genome surveillance complex (BASC). This gene product associates with RNA polymerase II, and through the C-terminal domain, also interacts with histone deacetylase complexes. This protein thus plays a role in transcription, DNA repair of double-stranded breaks, and recombination. Mutations in this gene are responsible for approximately 40% of inherited breast cancers and more than 80% of inherited breast and ovarian cancers. Alternative splicing plays a role in modulating the subcellular localization and physiological function of this gene. Many alternatively spliced transcript varian

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**Function :** disease:Defects in BRCA1 are a cause of genetic susceptibility to breast cancer (BC) [MIM:113705, 114480]. BC is an extremely common malignancy, affecting one in eight women during their lifetime. A positive family history has been identified as major contributor to risk of development of the disease, and this link is striking for early-onset breast cancer. Mutations in BRCA1 are thought to be responsible for 45% of inherited breast cancer. Moreover, BRCA1 carriers have a 4-fold increased risk of colon cancer, whereas male carriers face a 3-fold increased risk of prostate cancer. Cells lacking BRCA1 show defects in DNA repair by homologous recombination.,disease:Defects in BRCA1 are a cause of genetic susceptibility to ovarian cancer [MIM:113705].,disease:Defects in BRCA1 are a cause of susceptibility to familial breast-ovarian cancer type 1 (BROVCA1) [MIM:604370]. Mutations in BRCA1 are

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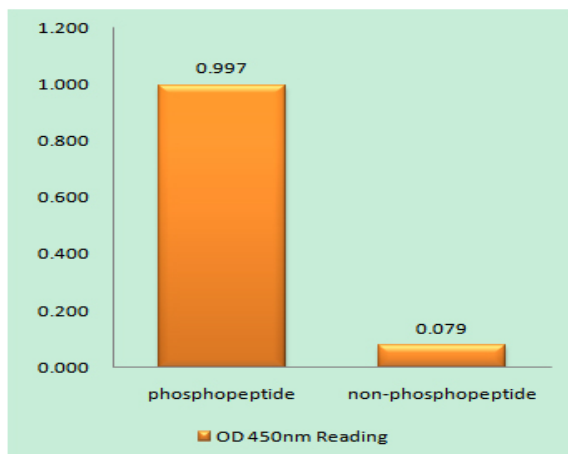
**Subcellular Location :** Nucleus . Chromosome . Cytoplasm . Localizes at sites of DNA damage at double-strand breaks (DSBs); recruitment to DNA damage sites is mediated by ABRAXAS1 and the BRCA1-A complex (PubMed:26778126). Translocated to the cytoplasm during UV-induced apoptosis (PubMed:20160719). .; [Isoform 3]: Cytoplasm.; [Isoform 5]: Cytoplasm .

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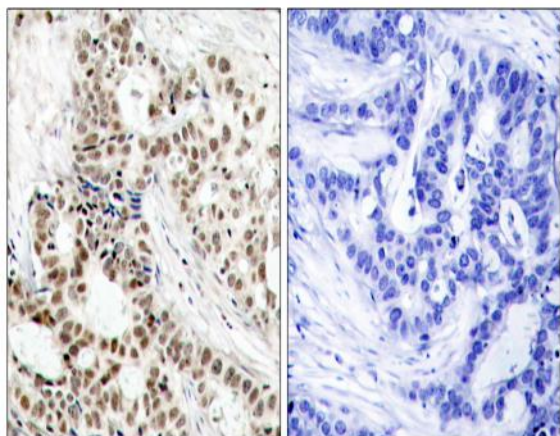
**Expression :** Isoform 1 and isoform 3 are widely expressed. Isoform 3 is reduced or absent in several breast and ovarian cancer cell lines.

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## Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using BRCA1 (Phospho-Ser1423) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using BRCA1 (Phospho-Ser1423) Antibody. The picture on the right is blocked with the phospho peptide.