

BRCA1 (phospho Ser1524) Polyclonal Antibody

Catalog No: YP0039

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;ELISA

Target: BRCA1

Fields: >>Platinum drug resistance;>>Homologous recombination;>>Fanconi anemia

pathway;>>Ubiquitin mediated proteolysis;>>PI3K-Akt signaling

pathway;>>MicroRNAs in cancer;>>Breast cancer

Gene Name: BRCA1

Protein Name: Breast cancer type 1 susceptibility protein

P38398

P48754

Human Gene Id: 672

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

BRCA1 around the phosphorylation site of Ser1524. AA range:1491-1540

Specificity: Phospho-BRCA1 (S1524) Polyclonal Antibody detects endogenous levels of

BRCA1 protein only when phosphorylated at S1524.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000 IHC 1:100 - 1:300. ELISA: 1:10000. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



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

Molecularweight: 208kD

Cell Pathway: Akt_PKB;Ubiquitin mediated proteolysis;

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

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 color cancer, whereas male carriers race a 3-loid 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

Subcellular Location:

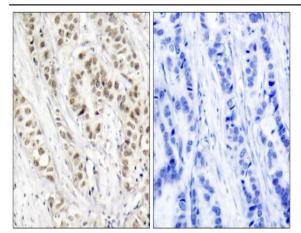
Nucleus . Chromosome . Cytoplasm . Localizes at sites of DNA damage at double-strand breaks (DSBs); recruitment to DNA damage sites is mediated by ABRAXAS1 and the BRCA1-A complex (PubMed:26778126). Translocated to the cytoplasm during UV-induced apoptosis (PubMed:20160719). .; [Isoform 3]:

Cytoplasm.; [Isoform 5]: Cytoplasm.

Expression: Isoform 1 and isoform 3 are widely expressed. Isoform 3 is reduced or absent in

several breast and ovarian cancer cell lines.

Products Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using BRCA1 (Phospho-Ser1524) Antibody. The picture on the right is blocked with the phospho peptide.