

Product Name: Phospho-BRCA1 (Ser1423) Rabbit Polyclonal Antibody**Catalog #: APRab00841**

For research use only.

Summary

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

Application

Dilution Ratio	WB 1:500-1:1000,IHC 1:50-1:100,ELISA 1:5000-1:20000
Molecular Weight	Calculated MW: 208 kDa; Observed MW: 208 kDa

Antigen Information

Gene Name	BRCA1
Alternative Names	BRCA1; RNF53; Breast cancer type 1 susceptibility protein; RING finger protein 53
Gene ID	672
SwissProt ID	P38398
Immunogen	The antiserum was produced against synthesized peptide derived from human BRCA1 around the phosphorylation site of Ser1423. AA range:1391-1440

Background

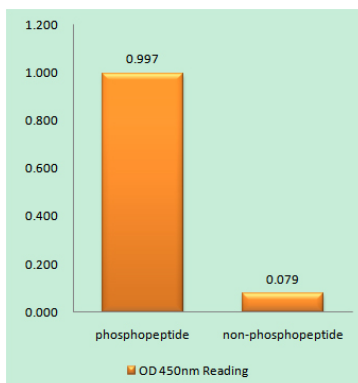
E3 ubiquitin-protein ligase that specifically mediates the formation of 'Lys-6'-linked polyubiquitin chains and plays a central

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).

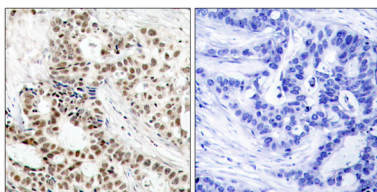
Research Area

Epigenetics and Nuclear Signaling

Image Data



EnzymeLinked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and NonPhospho-peptide (Phospho-right), using BRCA1 (Phospho-Ser142)antibody



Immunohistochemical analysis of paraffin-embedded Human tonsils using Phospho-BRCA1 (Ser1423) antibody. Sample with blocking peptide on the right. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.