

## Phospho-BRCA1(Ser1457) Ab

Cat.#: AF0057  
Size: 100ul,200ul

Concn.: 1mg/ml  
Source: Rabbit

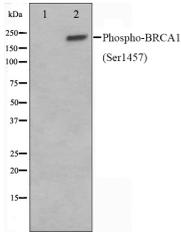
Mol.Wt.: 220kDa  
Clonality: Polyclonal

Application:	WB 1:500-1:2000
Reactivity:	Human
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Specificity:	Phospho-BRCA1(Ser1457) Ab detects endogenous levels of BRCA1 only when phosphorylated at Sersine 1457.
Immunogen:	A synthesized peptide derived from human BRCA1 around the phosphorylation site of Ser1457.
Uniprot:	P38398
Description:	This gene encodes a nuclear phosphoprotein that plays a role in maintaining genomic stability and 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 BASC for BRCA1-associated genome surveillance complex. This gene product associates with RNA polymerase II, and through the C-terminal domain, also interacts with histone deacetylase complex. 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 variants have been described for this gene but only some have had their full-length natures identified.
Subcellular Location:	Cytoplasm; Nucleus. Localizes at sites of DNA damage at double-strand breaks (DSBs) and recruitment to DNA damage sites is mediated by the BRCA1-A complex.
Tissue Specificity:	Isoform 1 and isoform 3 are widely expressed. Isoform 3 is reduced or absent in several breast and ovarian cancer cell lines.
Similarity:	The BRCT domains recognize and bind phosphorylated pSXXF motif on proteins. The interaction with the phosphorylated pSXXF motif of ABRAXAS1, recruits BRCA1 at

DNA damage sites.The RING-type zinc finger domain interacts with BAP1.

**Storage Condition and Buffer:**

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Western blot analysis on 293 cell lysates using Phospho-BRCA1(Ser1457) Ab,The lane on the left was treated with the antigen-specific peptide.

**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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