

Basic Information

Product Name	Anti-BRCA1 Antibody	
Gene Name	BRCA1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human BRCA1 recombinant protein (Position: E1661-Y1863). Human BRCA1 shares 65% and 66% amino acid (aa) sequence identity with mouse and rat BRCA1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	290 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

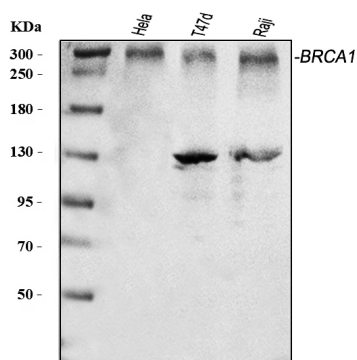
BRCA1, also known as BRCC1, is a gene which mapping to 17q21.3. This gene encodes a nuclear phosphoprotein that plays a role in maintaining genomic stability, and it also acts as a tumor suppressor. The encoded protein combines with other tumor suppressors, DNA damage sensors, and signal transducers to form a large multi-subunit protein complex known as the BRCA1-associated genome surveillance complex (BASC). BRCA1 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. In addition to it, BRCA1 may normally serve as a negative regulator of mammary epithelial cell growth and that this function is compromised in breast cancer either by direct mutation or by alterations in gene expression.

Reference

Anti-BRCA1 Antibody被引用在1文献中。

Selected Validation Data



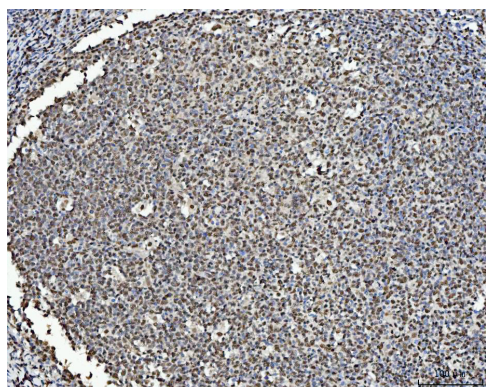
Western blot analysis of anti- BRCA1 antibody (PB9015). The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human T-47D whole cell lysates,

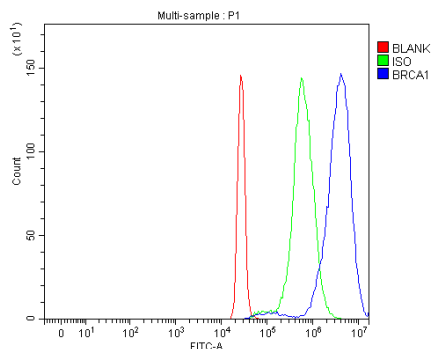
Lane 3: human Raji whole cell lysates.

Use rabbit anti- BRCA1 1:1000, probed with a goat anti-rabbit IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for BRCA1 at approximately 290KD. The expected band size for BRCA1 is at 208KD.



IHC analysis of BRCA1 using anti-BRCA1 antibody (PB9015).

BRCA1 was detected in a paraffin-embedded section of human tonsil tissue. The tissue section was incubated with rabbit anti-BRCA1 Antibody (PB9015) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of HepG2 cells using anti-BRCA1 antibody (PB9015).

Overlay histogram showing HepG2 cells stained with PB9015 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-BRCA1 Antibody (PB9015) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.