

Basic Information

Product Name	Anti-BRCA1 Antibody
Gene Name	BRCA1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ICC/IF
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human BRCA1 recombinant protein (Position: T1681-E1781). Human BRCA1 shares 73.3% and 74.3% 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 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400

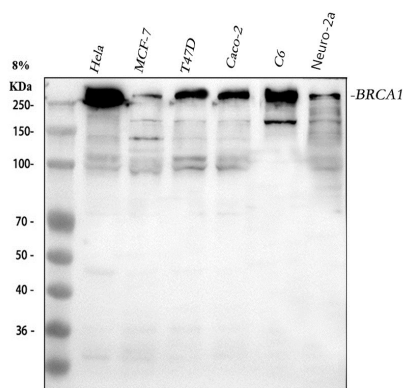
Storage

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

Background Information

BRCA1, mapped to 17q21.3, is also known as BRCC1. 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.

Selected Validation Data



Western blot analysis of BRCA1 using anti-BRCA1 antibody (A00005). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human MCF-7 whole cell lysates,

Lane 3: human T-47D whole cell lysates,

Lane 4: human Caco-2 whole cell lysates,

Lane 5: rat C6 whole cell lysates,

Lane 6: mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-BRCA1 antigen

affinity purified polyclonal antibody (A00005) at a dilution of 1:1000

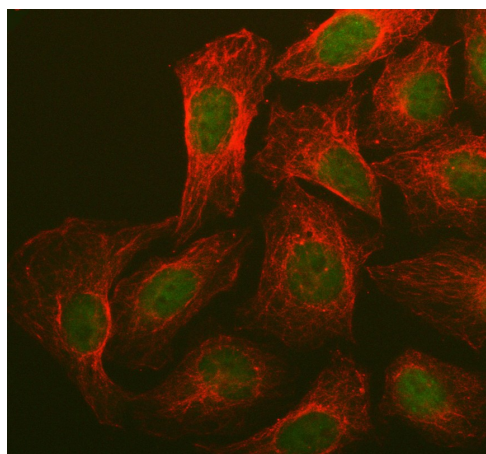
and probed with a goat anti-rabbit IgG-HRP secondary antibody

(Catalog # BA1054). The signal is developed using ECL Plus Western

Blotting Substrate (Catalog # AR1197). A specific band was detected

for BRCA1 at approximately 290 kDa. The expected band size for

BRCA1 is at 208 kDa.



ICC/IF analysis of BRCA1 using anti-BRCA1 antibody (A00005) and anti-Beta Tubulin antibody (M01857-3).

BRCA1 was detected in an immunocytochemical section of U2OS

cells. The section was incubated with rabbit anti-BRCA1 Antibody

(A00005) at a dilution of 1:100. Fluoro 488 Conjugated AffiniPure

Donkey Anti-rabbit IgG (H+L) (green)(Catalog#BA1146) and

Fluoro594-conjugated Goat Anti-mouse IgG Secondary Antibody

(red)(Catalog#BA1141) were used as secondary antibody.