

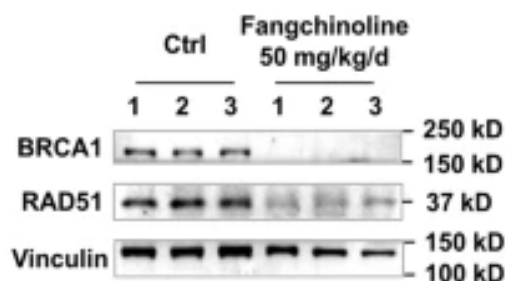
**BRCA1 Polyclonal Antibody**

<b>Catalog No :</b>	YT0519
<b>Reactivity :</b>	Human;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	BRCA1
<b>Fields :</b>	>>Platinum drug resistance;>>Homologous recombination;>>Fanconi anemia pathway;>>Ubiquitin mediated proteolysis;>>PI3K-Akt signaling pathway;>>MicroRNAs in cancer;>>Breast cancer
<b>Gene Name :</b>	BRCA1
<b>Protein Name :</b>	Breast cancer type 1 susceptibility protein
<b>Human Gene Id :</b>	672
<b>Human Swiss Prot No :</b>	P38398
<b>Mouse Swiss Prot No :</b>	P48754
<b>Rat Gene Id :</b>	497672
<b>Rat Swiss Prot No :</b>	O54952
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human BRCA1. AA range:1391-1440
<b>Specificity :</b>	BRCA1 Polyclonal Antibody detects endogenous levels of BRCA1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.

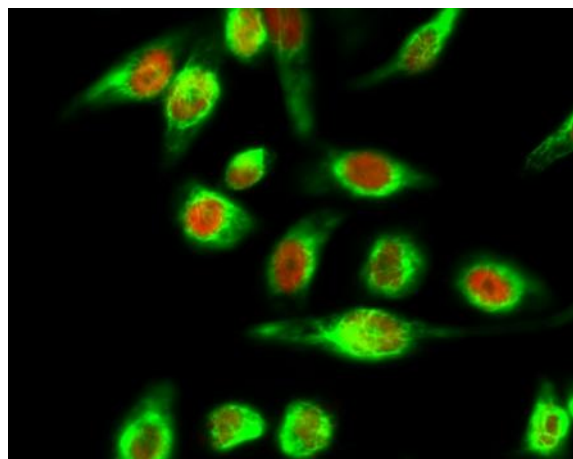
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	208kD
<b>Cell Pathway :</b>	Ubiquitin mediated proteolysis;
<b>Background :</b>	<p>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</p>
<b>Function :</b>	<p>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 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</p>
<b>Subcellular Location :</b>	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 .
<b>Expression :</b>	Isoform 1 and isoform 3 are widely expressed. Isoform 3 is reduced or absent in several breast and ovarian cancer cell lines.
<b>Tag :</b>	orthogonal,hot

<b>Sort :</b>	1
<b>No4 :</b>	1
<b>Host :</b>	Rabbit
<b>Modifications :</b>	Unmodified

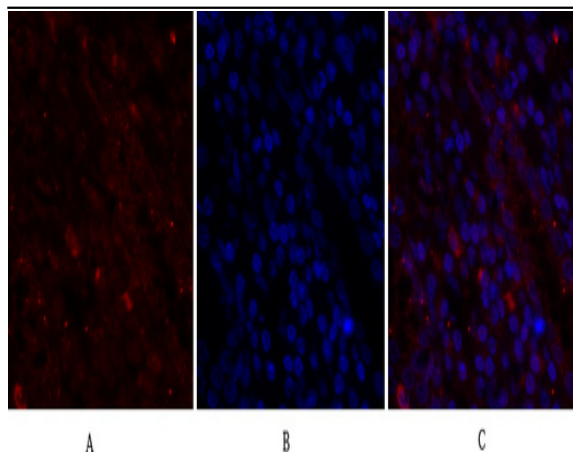
## Products Images

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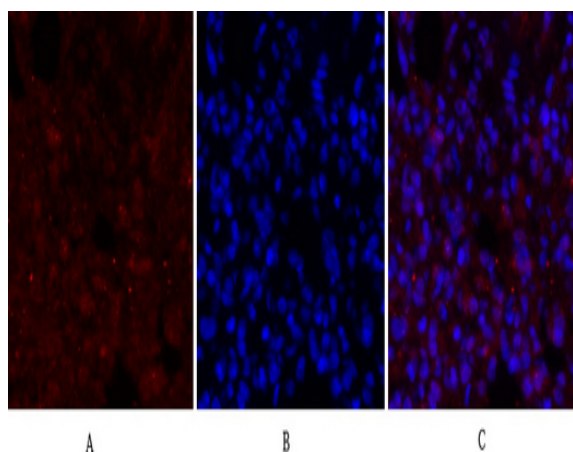
Bao, K., Li, Y., Wei, J. et al. Fangchinoline suppresses conjunctival melanoma by directly binding FUBP2 and inhibiting the homologous recombination pathway. *Cell Death Dis* 12, 380 (2021).



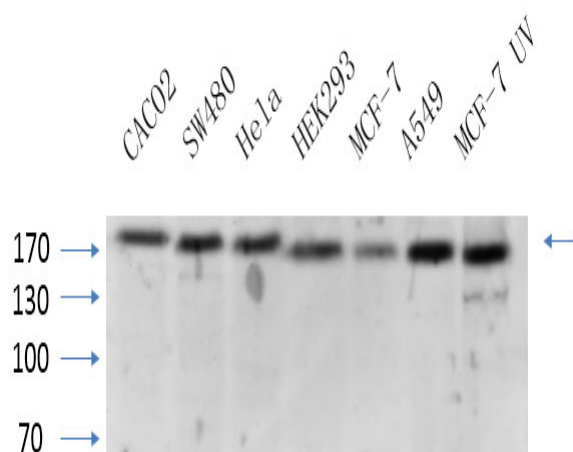
Immunofluorescence analysis of HeLa cell. 1, BRCA1 Polyclonal Antibody (green) was diluted at 1:200 (4 ° overnight). (red) was diluted at 1:200 (4 ° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog:RS3608 was diluted at 1:1000 (room temperature, 50min).



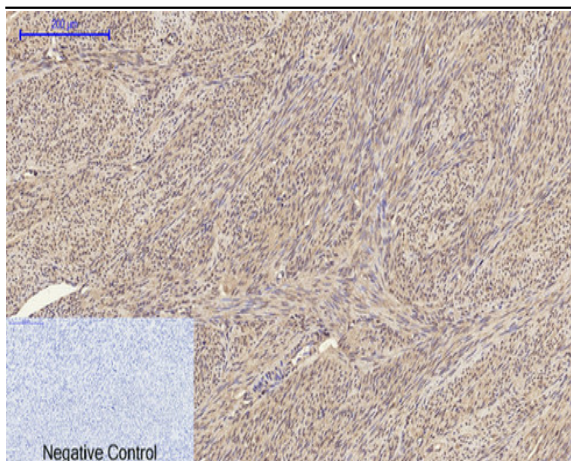
Immunofluorescence analysis of human-stomach tissue. 1, BRCA1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



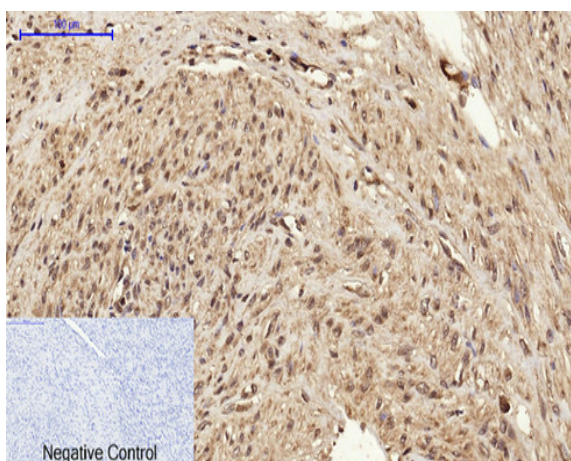
Immunofluorescence analysis of rat-lung tissue. 1, BRCA1 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



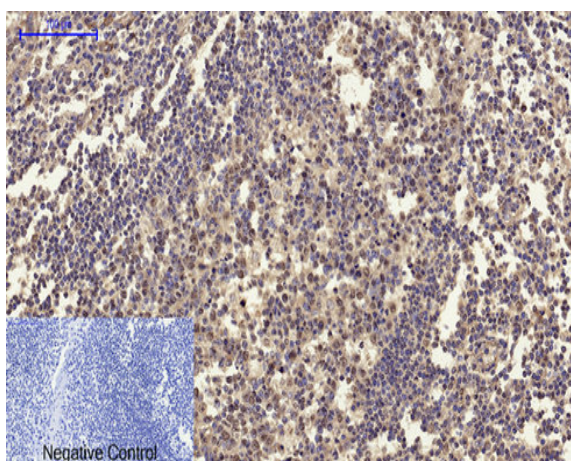
Western Blot analysis of various cells using primary antibody diluted at 1:1000 (4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit (SM-005, Inventibiotec, MN, USA).



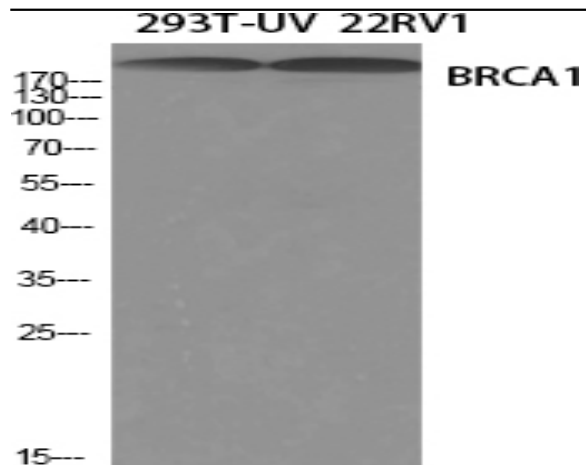
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, BRCA1 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



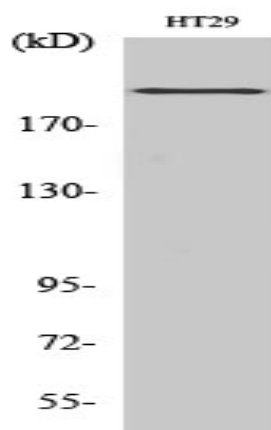
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, BRCA1 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



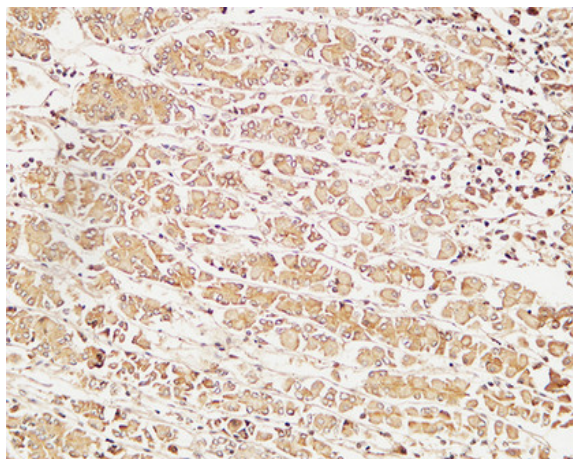
Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1, BRCA1 Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



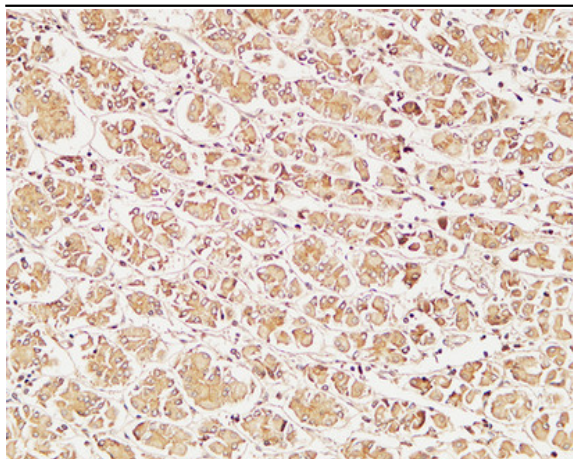
Western Blot analysis of various cells using BRCA1 Polyclonal Antibody diluted at 1:1000



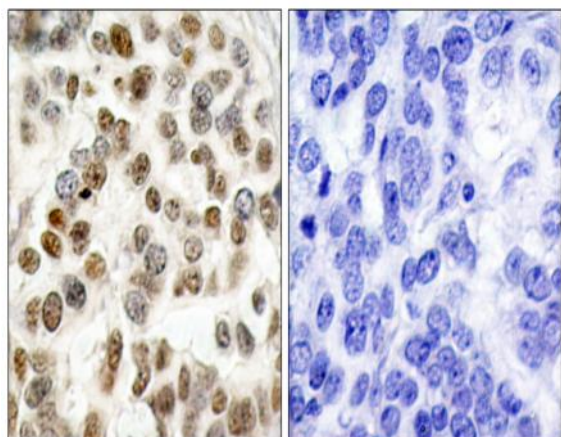
Western Blot analysis of HT29 cells using BRCA1 Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using BRCA1 Antibody. The picture on the right is blocked with the synthesized peptide.