



Rabbit Anti-BRCC4 antibody

SL5710R

Product Name:	BRCC4
Chinese Name:	乳腺癌易感基因复合蛋白4抗体
Alias:	Brain and reproductive organ expressed (TNFRSF1A modulator); BRCA1/BRCA2 containing complex subunit 4; BRCA1/BRCA2 containing complex subunit 45; BRCC4; BRCC45; BRE HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BRCC4/BRCC45:301-383/383
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	BRCC45 was initially suggested to be a housekeeping protein that is highly expressed in brain and reproductive organs. Later experiments indicated BRCC45 forms a complex with the breast and ovarian predisposition proteins BRCA1 and BRCA2 as well as RAD51 and BRCC36. This complex has a ubiquitin E3 ligase activity and is thought to enhance cellular survival following DNA damage. BRCC45 has also been suggested to

function as a death receptor associated anti apoptotic protein by inhibiting the BID induced activation of the mitochondrial apoptotic pathway. Higher levels of BRCC45 were detected in the majority of hepatocellular carcinomas, suggesting that BRCC45 may promote tumorigenesis when overexpressed. At least three isoforms of BRCC45 are known to exist.

Function:

Component of the BRCA1-A complex, a complex that specifically recognizes 'Lys-63'-linked ubiquitinated histones H2A and H2AX at DNA lesions sites, leading to target the BRCA1-BARD1 heterodimer to sites of DNA damage at double-strand breaks (DSBs). The BRCA1-A complex also possesses deubiquitinase activity that specifically removes 'Lys-63'-linked ubiquitin on histones H2A and H2AX. In the BRCA1-A complex, it acts as an adapter that bridges the interaction between BABAM1/NBA1 and the rest of the complex, thereby being required for the complex integrity and modulating the E3 ubiquitin ligase activity of the BRCA1-BARD1 heterodimer. Probably also plays a role as a component of the BRISC complex, a multiprotein complex that specifically cleaves 'Lys-63'-linked ubiquitin. May play a role in homeostasis or cellular differentiation in cells of neural, epithelial and germline origins. May also act as a death receptor-associated anti-apoptotic protein, which inhibits the mitochondrial apoptotic pathway. May regulate TNF-alpha signaling through its interactions with TNFRSF1A; however these effects may be indirect.

Subunit:

Component of the BRCA1-A complex, at least composed of the BRCA1, BARD1, UIMC1/RAP80, FAM175A/Abraxas, BRCC3/BRCC36, BRE/BRCC45 and BABAM1/NBA1. In the BRCA1-A complex, interacts directly with FAM175A/Abraxas, BRCC3/BRCC36 and BABAM1/NBA1. Binds polyubiquitin. Component of the BRISC complex, at least composed of the FAM175B/ABRO1, BRCC3/BRCC36, BRE/BRCC45 and BABAM1/NBA1. Component of the BRCA1/BRCA2 containing complex (BRCC), which also contains BRCA1, BRCA2, BARD1, BRCC3/BRCC36 and RAD51. BRCC is a ubiquitin E3 ligase complex that enhances cellular survival following DNA damage. May interact with FAS and TNFRSF1A.

Subcellular Location:

Cytoplasm. Nucleus. Note=Localizes at sites of DNA damage at double-strand breaks (DSBs).

Tissue Specificity:

Expressed in all cell lines examined. Highly expressed in placenta.

Similarity:

Belongs to the BRE family.

SWISS:

Q9NXR7

Gene ID:
9577

Database links:

[Entrez Gene: 9577](#)Human

[Entrez Gene: 107976](#)Mouse

[Entrez Gene: 362704](#)Rat

[Olim: 610497](#)Human

[SwissProt: A6QQW8](#)Cow

[SwissProt: Q9NXR7](#)Human

[SwissProt: Q8K3W0](#)Mouse

[SwissProt: Q6P7Q1](#)Rat

[Unigene: 258314](#)Human

[Unigene: 482126](#)Mouse

[Unigene: 224501](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

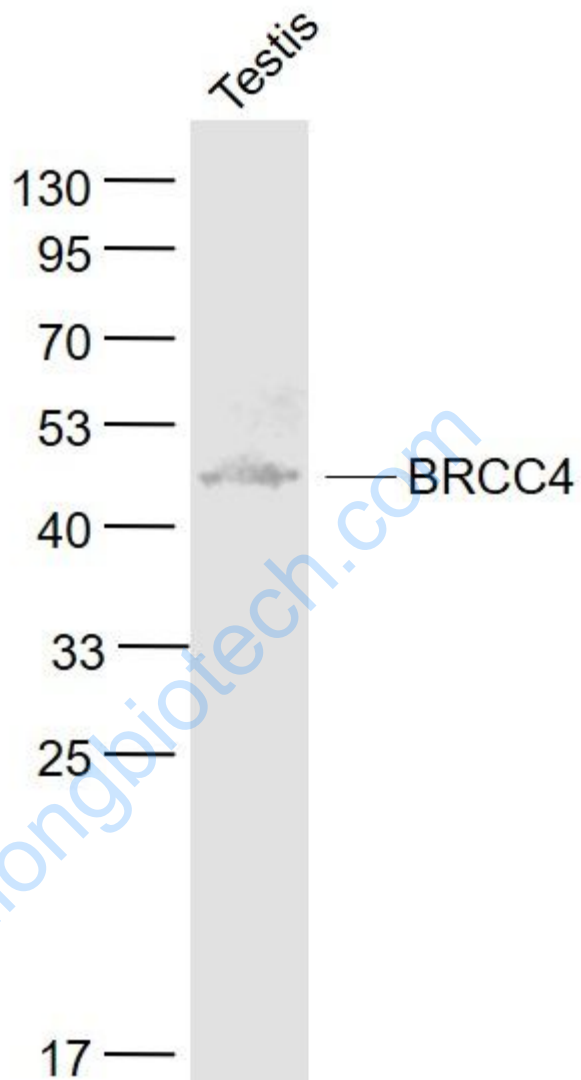
Liver (Mouse) Lysate at 40 ug

Primary: Anti- BRCC4 (SL5710R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 47 kD

Observed band size: 47 kD



Sample:

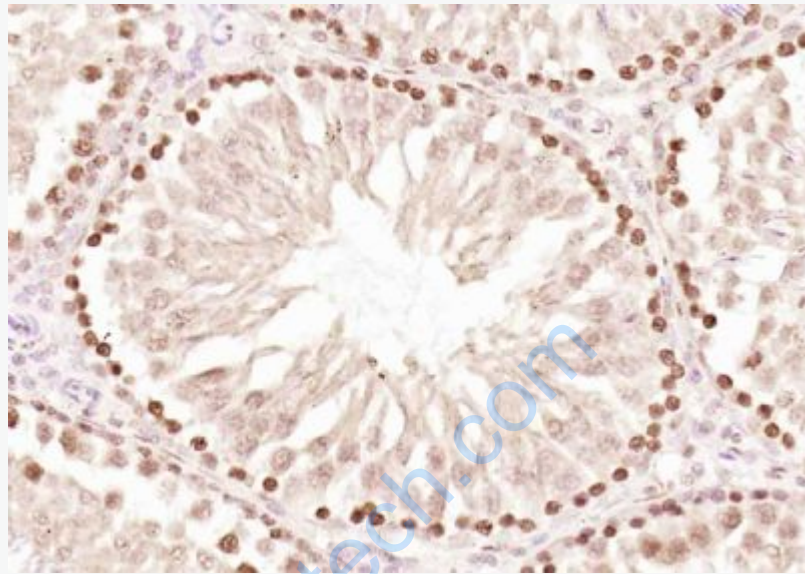
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Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (BRCC4) Polyclonal Antibody, Unconjugated (SL5710R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.