

Rabbit BRCA2 Polyclonal Antibody | anti-BRCA2 antibody

BRCA2 Antibody

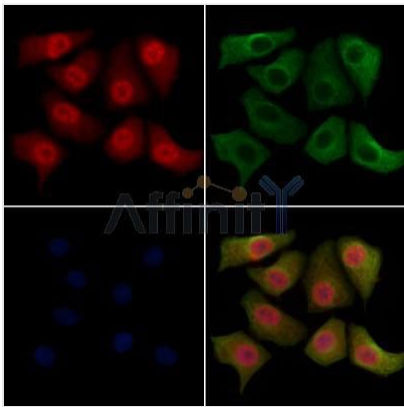
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328605	Rabbit	Human, Mouse, Rat	ELISA, Western Blot

PRODUCT SYNONYMS

BRCA2; Polyclonal Antibody; BRCA2 Antibody; BRCA 2; BRCA1/BRCA2 containing complex subunit 2; Brca2; DNA repair associated; BRCA2_HUMAN; BRCC 2; BRCC2; Breast and ovarian cancer susceptibility gene early onset; breast and ovarian cancer susceptibility protein 2; Breast cancer 2 early onset; Breast Cancer 2 tumor suppressor; Breast cancer susceptibility protein BRCA2; Breast cancer type 2 susceptibility protein; BROVCA2; FAD; FAD 1; FAD; FAD1; FANCB; FANCD 1; FANCD; FANCD1; FANCD1 gene; Fanconi anemia complementation group D1; Fanconi anemia group D1 protein; GLM3; mutant BRCA2; OTTHUMP00000018803; OTTHUMP00000042401; PNCA2; XRCC11; anti-BRCA2 antibody

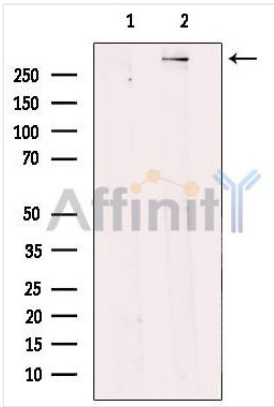
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	BRCA2 Antibody detects endogenous levels of BRCA2.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid; Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	3418
Applicable Applications for anti-BRCA2 antibody	ELISA (Peptide ELISA), WB (Western Blot)
Immunogen	A synthesized peptide derived from human BRCA2, corresponding to a region within the internal amino acids.
Preparation and Storage	Store at -20 degrees C. Stable for 12 months from date of receipt.



IF (Immunofluorescence)

AF7817 staining HeLa cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degrees C. Samples were then incubated with primary Ab(AF7817 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37 degrees C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary Ab. The nuclear counter stain is DAPI(blue).



WB (Western Blot)

Western blot analysis of extracts from 293, using BRCA2 Ab. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-BRCA2 antibody

Description: Involved in double-strand break repair and/or homologous recombination. Binds RAD51 and potentiates recombinational DNA repair by promoting assembly of RAD51 onto single-stranded DNA (ssDNA). Acts by targeting RAD51 to ssDNA over double-stranded DNA, enabling RAD51 to displace replication protein-A (RPA) from ssDNA and stabilizing RAD51-ssDNA filaments by blocking ATP hydrolysis. Part of a PALB2-scaffolded HR complex containing RAD51C and which is thought to play a role in DNA repair by HR. May participate in S phase checkpoint activation. Binds selectively to ssDNA, and to ssDNA in tailed duplexes and replication fork structures. May play a role in the extension step after strand invasion at replication-dependent DNA double-strand breaks; together with PALB2 is involved in both POLH localization at collapsed replication forks and DNA polymerization activity. In concert with NPM1, regulates centrosome duplication. Interacts with the TREX-2 complex (transcription and export complex 2) subunits PCID2 and SEM1, and is required to prevent R-loop-associated DNA damage and thus transcription-associated genomic instability. Silencing of BRCA2 promotes R-loop accumulation at actively transcribed genes in replicating and non-replicating cells, suggesting that BRCA2 mediates the control of R-loop associated genomic instability, independently of its known role in homologous recombination (PubMed:24896180).

Post Translational Modifications: Phosphorylated by ATM upon irradiation-induced DNA damage. Phosphorylation by CHEK1 and CHEK2 regulates interaction with RAD51. Phosphorylation at Ser-3291 by CDK1 and CDK2 is low in S phase when recombination is active, but increases as cells progress towards mitosis; this phosphorylation prevents homologous recombination-dependent repair during S phase and G2 by inhibiting RAD51 binding. Ubiquitinated in the absence of DNA damage; this does not lead to proteasomal degradation. In contrast, ubiquitination in response to DNA damage leads to proteasomal degradation.

Subunit Structure: Monomer and dimer (PubMed:20729858). Interacts with RAD51; regulates RAD51 recruitment and function at sites of DNA repair (PubMed:12442171, PubMed:15800615, PubMed:18317453, PubMed:20729832, PubMed:20729859). Interacts with WDR16, USP11, DMC1, ROCK2 and NPM1 (PubMed:15314155, PubMed:15967112, PubMed:20729832, PubMed:21084279). Interacts with SEM1; the interaction masks a nuclear export signal in BRCA2 (PubMed:10373512, PubMed:16205630, PubMed:21719596, PubMed:24013206). Interacts with both nonubiquitinated and monoubiquitinated FANCD2; this complex also includes XRCC3 and phosphorylated FANCG (PubMed:15115758, PubMed:15199141, PubMed:18212739). Part of a BRCA complex containing BRCA1, BRCA2 and PALB2 (PubMed:19369211). Interacts directly with PALB2 which may serve as a scaffold for a HR complex containing PALB2, BRCA2, RAD51C, RAD51 and XRCC3 (PubMed:19369211, PubMed:24141787, PubMed:28319063, PubMed:16793542, PubMed:19609323). Interacts with BRCA1 only in the presence of PALB2 which serves as the bridging protein (PubMed:19369211). Interacts with POLH; the interaction is direct (PubMed:24485656). Interacts with the TREX-2 complex subunits PCID2 and SEM1 (PubMed:24896180, PubMed:21719596).

NCBI AND UNIPROT INFORMATION

NCBI GI #	119395734
NCBI GeneID	675
NCBI Accession #	NP_000050.2
NCBI GenBank Nucleotide #	NP_000050.2
UniProt Accession #	P51587
Molecular Weight	384 kDa
NCBI Official Full Name	breast cancer type 2 susceptibility protein
NCBI Official Synonym Full Names	BRCA2 DNA repair associated
NCBI Official Symbol	BRCA2
NCBI Official Synonym Symbols	FAD; FACD; FAD1; GLM3; BRCC2; FANCD; PNCA2; FANCD1; XRCC11; BROVCA2
NCBI Protein Information	breast cancer type 2 susceptibility protein
UniProt Protein Name	Breast cancer type 2 susceptibility protein
UniProt Gene Name	BRCA2
UniProt Synonym Gene Names	FACD; FANCD1
UniProt Entry Name	BRCA2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/brca2-antibody-peptide-elisa-western-blot-elisa/328605>