

Product datasheet for TA590549

BRCA1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, WB

Recommended Dilution: WB: 1:5000-1:20000; ELISA: 1:100-1:2000

Reactivity: Human

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

Immunogen: DNA immunization. This antibody is specific for the C Terminus Region of the target protein.

Formulation: 20 mM Potassium Phosphate, 150 mM Sodium Chloride, pH 7.0

Concentration: 1.2mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: BRCA1 DNA repair associated

Database Link: NP 009225

Entrez Gene 672 Human

P38398



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Background:

BRCA1 (breast and ovarian cancer susceptibility protein 1) is a RING finger protein containing a BRCT domain. BRCA1 exists as a heterodimer with 22 possible isoforms. The full length protein has a reported molecular weight of 208 kD. BRCA1 localizes to the mitotic spindle microtubules, centriole walls, pericentriolar fibers at centrosomes. Unphosphorylated BRCA1 localizes on chromosomes from metaphase through telophase; phosphorylated BRCA1 resides in inner chromosomal structure, centrosome, cleavage furrow during prophase through telophase, and relocalizes to the perinuclear region when cells are subjected to IR or UV radiation in S phase. BRCA1 acts as a tumor suppressor and can function as a secreted growth inhibitory protein, participate in transcription coupled repair of oxidative DNA damage, X-chromosome inactivation, and can function as a E3 ubiquitin ligase. BRCA1 can be transcriptionally downregulated by Ets-2, Brg-1, and Hmga-1. BRCA1 can be modified by glycosylation, ubiquitination and phosphorylation by CDK4, ATM/ATR, cdk2, and hChk2. The BRCA1 protein has been reported to interact with RNA polymerase II holoenzyme and BARD1. BRCA1 contains at least two nuclear localization signals and is proposed to be a tumor suppressor protein. It is a serine phosphoprotein that undergoes hyperphosphorylation during late G1 and S phases of the cell cycle and is transiently dephosphorylated early after M phase. BRCA1 protein alters in a qualitative and quantitative manner during cell cycle progression. The amount of BRCA1 protein is highest during S phase and remains elevated toward G2 / M, before it declines in early G1 phase. Inherited loss of BRCA1 function confers an increased susceptibility for both breast and ovarian cancer.

Synonyms: BRCAI; BRCC1; BROVCA1; FANCS; IRIS; PNCA4; PPP1R53; PSCP; RNF53

Note: This antibody was generated by SDIX's Genomic Antibody Technology ® (GAT). Learn about

<u>GAT</u>

Protein Families: Druggable Genome, Transcription Factors

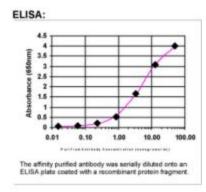
Protein Pathways: Ubiquitin mediated proteolysis

Product images:



Western Blot: BRCA1 Antibody - Western Blot was performed using affinity purified SEQer BRCA1 antibody, aa (1439-1538) antibody. The lanes contain 5-30ug of a whole cell extract. Final concentration of antibodies = 0.1ug/ml (1:10,000 dilution). The blot was probed overnight with the SEQer BRCA1 antibody, aa (1439-1538) antibody. Blot was then washed according to protocol and probed with goat-anti-Rabbit-HRP conjugate at 1:5000 dilution, washed and developed using chemiluminescence (film exposure 5-30sec). The protein was detected as represented by the band shown.





ELISA: BRCA1 Antibody