

BRCA2 Polyclonal Antibody
Catalog # AP68703**Specification**

BRCA2 Polyclonal Antibody - Product Information

Application	IHC
Primary Accession	P51587
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal

BRCA2 Polyclonal Antibody - Additional Information**Gene ID** 675**Other Names**

BRCA2; FACD; FANCD1; Breast cancer type 2 susceptibility protein; Fanconi anemia group D1 protein

Dilution

IHC~~Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

BRCA2 Polyclonal Antibody - Protein Information**Name** BRCA2 ([HGNC:1101](#))**Synonyms** FACD, FANCD1**Function**

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).

Cellular Location

Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Colocalizes with ERCC5/XPG to nuclear foci following DNA replication stress

Tissue Location

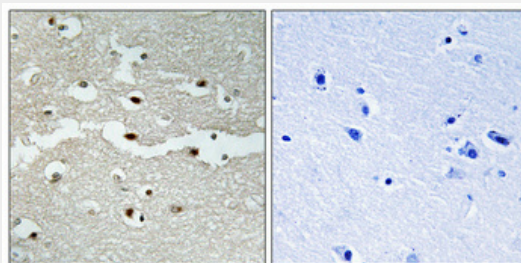
Highest levels of expression in breast and thymus, with slightly lower levels in lung, ovary and spleen

BRCA2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BRCA2 Polyclonal Antibody - Images



BRCA2 Polyclonal Antibody - Background

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