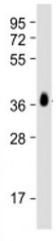
BRCA2 Antibody [clone 1847CT631.23.58] (F54104)

Catalog No.	Formulation	Size
F54104-0.2ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.2 ml
F54104-0.05ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.05 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1847CT631.23.58
Purity	Protein G purified
UniProt	P51587
Applications	WB: 1:2000
Limitations	This BRCA2 antibody is available for research use only.



Western blot testing of BRCA2 at 1:2000 + partial recombinant protein. Predicted molecular weight of full protien: ~384 kDa.

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 DSS1, 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. [UniProt]

Studies examining homologous recombination and hereditary tumor susceptibility pathways may also benefit from our BRCA1 antibody page featuring a highly specific DNA repair marker associated with genomic stability maintenance.

Application Notes

The stated application concentrations are suggested starting points. Titration of the BRCA2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Recombinant human BRCA2 was used as the immunogen for the BRCA2 antibody.

Storage

Aliquot the BRCA2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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