

**Rabbit Anti-BRCA2 Protein Polyclonal: RC0024, RC0024RTU7**

**Intended Use:** For Research Use Only

**Description:** BRCA2 is a nuclear protein that acts as a tumor suppressor. Germline mutation of BRCA2 accounts for many cases of familial breast and ovarian cancer. 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. May participate in S phase checkpoint activation. Binds selectively to ssDNA, and to ssDNA in tailed duplexes and replication fork structures.

**Specifications:**

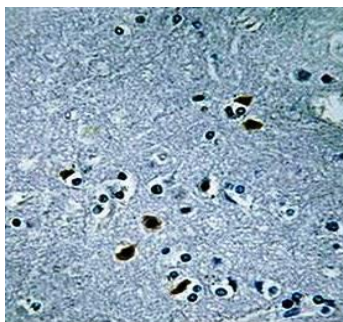
Clone: Polyclonal  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human, rat  
Immunogen: Synthesized peptide derived from N-terminal of human BRCA2  
Localization: Nucleus  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA  
Package:

Description	Catalog No.	Size
BRCA2 Protein Concentrated	RC0024	1 ml
BRCA2 Protein Prediluted	RC0024RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Breast cancer  
Concentrated Dilution: 10-100  
Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: Overnight @ 4°C  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human brain stained with anti-BRCA2 using DAB

**References:**

1. FoxM1-dependent RAD51 and BRCA2 signaling protects idiopathic pulmonary fibrosis fibroblasts from radiation-induced cell death. J Im, et al. Cell Death Dis, 9(6):584, 2018.
2. RAS promotes tumorigenesis through genomic instability induced by imbalanced expression of Aurora-A and BRCA2 in midbody during cytokinesis. Yang G, et al. Int J Cancer, 133(2):275-85, 2013.

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Rev. A