

Mouse Anti-BRCA2 Protein [MD357]: MC0635, MC0635RTU7

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:

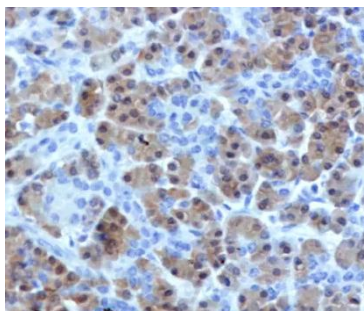
Clone: MD357
Source: Mouse
Isotype: IgG1k
Reactivity: Human
Immunogen: Recombinant fragment aa 200-500 of human BRCA2 protein
Localization: Nucleus, cytoplasm
Formulation: Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
BRCA2 Protein Concentrated	MC0635	1 ml
BRCA2 Protein Prediluted	MC0635RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Breast cancer, breast, lung, ovary, spleen
Concentrated Dilution: 50-200
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human salivary gland 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.