

Mouse Anti-BRCA1 Protein [MD216]: MC0428, MC0428RTU7

Intended Use: For Research Use Only

Description: The BRCA1 gene codes for a nuclear phosphoprotein that plays a role in maintaining genomic stability and acts as a tumor suppressor. The normal gene plays a role in repairing breaks in DNA. If a mutation occurs in this gene the repair function may become disabled thus leading to more DNA replication errors and neoplastic growth. Current findings suggest that BRCA1 may play an as yet undefined protective role in cells, as it is strongly expressed in epithelial cells undergoing high levels of proliferation in association with differentiation. Additional findings have determined that complete loss of BRCA1 nuclear expression in breast cancer and the correlation with poor prognostic markers imply that the altered BRCA1 phenotype may provide an added prognostic parameter for breast cancer and could be applied for a potential rapid screening technique to identify BRCA1 mutations.

Specifications:

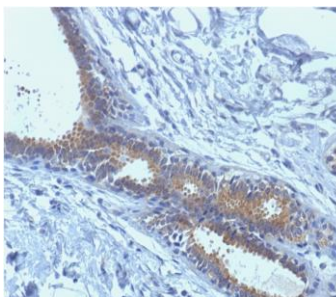
Clone: MD216
Source: Mouse
Isotype: IgG1k
Reactivity: Human
Immunogen: Recombinant human BRCA1 protein fragment aa445-620
Localization: Nucleus
Formulation: Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
BRCA1 Protein Concentrated	MC0428	1 ml
BRCA1 Protein Prediluted	MC0428RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Breast cancer
Concentrated Dilution: 25-100
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 breast carcinoma stained with anti-BRCA1 using DAB

References:

1. The metabolic function of cyclin D3-CDK6 kinase in cancer cell survival. Wang H, Nicolay BN, et al. Nature, Jun 15;546(7658):426-430. 2017.
2. BRCA1 haploinsufficiency for replication stress suppression in primary cells. Pathania S., et al. Nat Commun. Nov 17;5:5496, 2014.