

Mouse Anti-BRCA-1 Protein [MS110]: MC0504, MC0504RTU7

Intended Use: For Research Use Only

Description: The BRCA-1 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 BRCA-1 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 BRCA-1 nuclear expression in breast cancer and the correlation with poor prognostic markers imply that the altered BRCA-1 phenotype may provide an added prognostic parameter for breast cancer and could be applied for a potential rapid screening technique to identify BRCA-1 mutations.

Specifications:

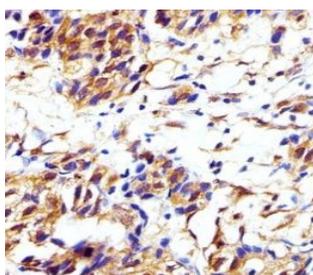
Clone: MS110
Source: Mouse
Isotype: IgG1
Reactivity: Human
Localization: Nucleus
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
BRCA-1 Protein Concentrated	MC0504	1 ml
BRCA-1 Protein Prediluted	MC0504RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Breast cancer
Concentrated Dilution: 25-100
Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using 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-BRCA-1 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.

Doc. 100-MC0504
Rev. A