

DESCRIPTION

Species Reactivity	Human
Specificity	Detects endogenous human BRCA2.
Source	Monoclonal Mouse IgG ₁ Clone # 234403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BRCA2 Met1-Thr200 Accession # P51587
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

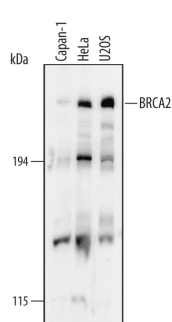
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of human breast cancer tissue

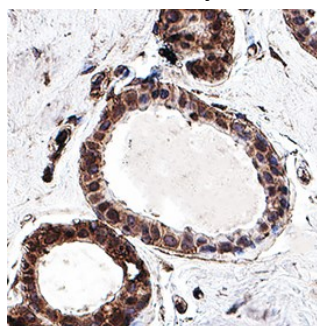
DATA

Western Blot



Detection of Human BRCA2 by Western Blot. Western blot shows lysates of Capan-1 human pancreatic adenocarcinoma cell line, HeLa human cervical epithelial carcinoma cell line, and U2OS human osteosarcoma cell line. PVDF membrane was probed with 0.2 µg/mL of Human BRCA2 Monoclonal Antibody (Catalog # MAB2476) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for BRCA2 at approximately 380 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



BRCA2 in Human Breast Cancer Tissue. BRCA2 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Mouse Anti-Human BRCA2 Monoclonal Antibody (Catalog # MAB2476) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and nuclei in epithelial cells. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

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. At the cellular level, BRCA2 is involved in homologous recombination (HR), a form of double-strand break repair. BRCA2 interacts with the Rad51 recombinase, another protein critical for HR, to preserve chromosomal integrity.