

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BRIP1/FANCI in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) FANCI, D2, E, F, G, I, L, M, or recombinant mouse BRIP1/FANCI is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 652747
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BRIP1/FANCI Ser2-Arg160 Accession # Q9BX63
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.

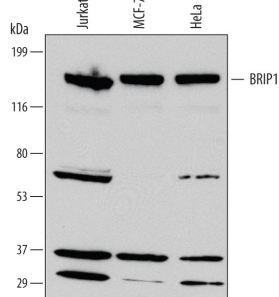
APPLICATIONS

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	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

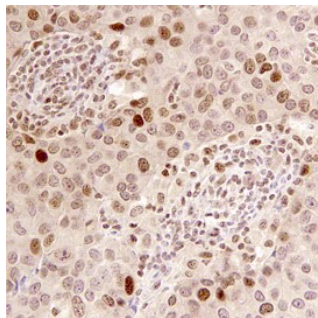
DATA

Western Blot



Detection of Human BRIP1/FANCI by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, MCF-7 human breast cancer cell line, and HeLa human cervical epithelial carcinoma cell line. PVDF Membrane was probed with 1 µg/mL of Human BRIP1/FANCI Monoclonal Antibody (Catalog # MAB6496) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for BRIP1/FANCI at approximately 140 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



BRIP1/FANCI in Human Breast Cancer Tissue. BRIP1/FANCI was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Human BRIP1/FANCI Monoclonal Antibody (Catalog # MAB6496) at 15 µg/mL overnight at 4 °C. 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 the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

BRCA1-interacting protein 1 (BRIP1), also known as Fanconi anemia complementation group J protein (FANCI) and BACH1, is a 130 kDa ubiquitously expressed DNA helicase. BRIP1 binds to the BRCT domain of BRCA1 and regulates BRCA1 dependent DNA repair and cell cycle checkpoint control. It is mutated in patients with Fanconi anemia, a disorder characterized by chromosomal instability and increased risk of developing cancer. Within amino acids 1-160, human BRIP1 shares 78% and 74% aa sequence identity with mouse and rat BRIP1, respectively.