

DESCRIPTION

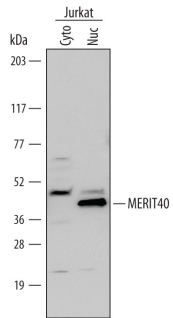
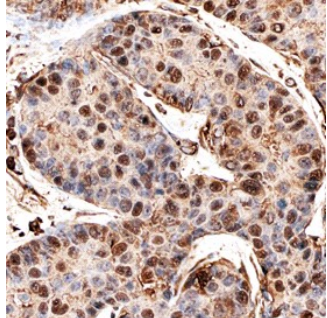
Species Reactivity	Human
Specificity	Detects human MERIT40 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human MERIT40 Asn182-Val329 Accession # Q9NWW8
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 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	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human MERIT40 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line. Gel was loaded with 20 µg of cytoplasmic (Cyto) and 10 µg of nuclear extracts (Nuc). PVDF Membrane was probed with 1 µg/mL of Human MERIT40 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6604) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for MERIT40 at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>MERIT40 in Human Breast Cancer Tissue. MERIT40 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Human MERIT40 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6604) at 10 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-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to glandular epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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

MERIT40 (MEdiator of Rap80 Interactions and Targeting subunit of 40 kDa; also NBA1 and c19orf62 and HSPC142) is a 40 kDa member of the MERIT40 family of proteins. It is ubiquitously expressed, and participates in the DNA damage response. At sites of double strand breaks, histones are phosphorylated, ubiquitinated, and deubiquitinated, with repairs performed by a sequentially formed complex that contains BRCA1, Rap80 and BRE. MERIT40 apparently serves as a scaffold protein that maintains the integrity of the complex. Human MERIT40 is 329 amino acids (aa) in length. It contains one VWF-A domain (aa 95-298) and six utilized Ser/Thr phosphorylation sites. There are three potential splice variants. One shows a 13 aa substitution for aa 234-329, a second possesses a 105 aa substitution for aa 263-329, while a third shows a 37 aa substitution for aa 1-115, coupled to a deletion of aa 263-329. Over aa 182-329, human MERIT40 shares 95% aa identity with mouse MERIT40.