

DESCRIPTION

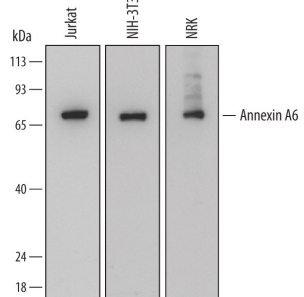
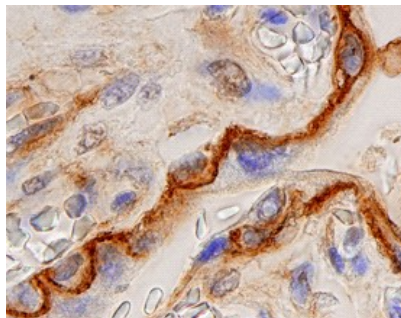
Species Reactivity	Human
Specificity	Detects human Annexin A6 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human Annexin A1, A2, A3, A4, A8, A9, A10, A11, or A13 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 686921
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Annexin A6 Ala2-Asp673 Accession # P08133
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 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	0.1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human, Mouse, and Rat Annexin A6 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, NIH-3T3 mouse embryonic fibroblast cell line, and NRK rat normal kidney cell line. PVDF Membrane was probed with 0.1 µg/mL of Mouse Anti-Human Annexin A6 Monoclonal Antibody (Catalog # MAB5186) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Annexin A6 at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>	<p>Immunohistochemistry</p>  <p>Annexin A6 in Human Placenta. Annexin A6 was detected in immersion fixed paraffin-embedded sections of human placenta using Mouse Anti-Human Annexin A6 Monoclonal Antibody (Catalog # MAB5186) 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 membranes of syncytiotrophoblast 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 0.5 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

The Annexins comprise a family of proteins that are involved in many aspects of cellular membrane dynamics and the regulation of membrane-associated proteins. They are characterized by multiple repeats of 60-70 amino acids (aa) which assemble into a curved disc-like domain that binds to membrane phospholipids in a calcium-dependent manner (1). Human Annexin A6, also known as Annexin VI, Lipocortin VI, and Chromobindin 20, is a 68 kDa protein that consists of eight tandem annexin repeats (2). Alternate splicing results in the deletion of 6 aa at the start of the seventh repeat (3). Human Annexin A6 shares 95% aa sequence identity with mouse and rat Annexin A6. Within the cell, Annexin A6 is involved in the regulation of membrane vesicle trafficking and chloride and calcium ion conductance (1, 4). Annexin A6 is also secreted into the bile and is present on the cell surface (5-7). Annexin A6 binds to chondroitin sulfate in a calcium-dependent manner and to heparan sulfate independently of calcium (6, 8). These interactions enable cell surface Annexin A6 to mediate adhesion such as that between macrophages and hepatic sinusoidal endothelial cells (6, 7).

References:

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