

DESCRIPTION

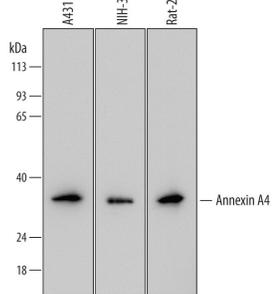
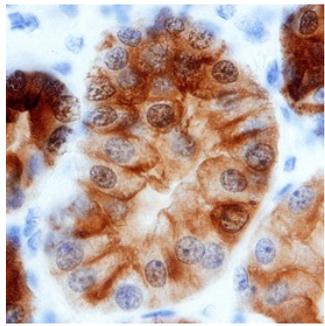
Species Reactivity	Human
Specificity	Detects human Annexin A4 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human Annexin A1, A2, A3, A5, A6, A8, A9, A10, A11, or 13A is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 694624
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Annexin A4 Met1-Asp319 Accession # P09525
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 A4 by Western Blot. Western blot shows lysates of A431 human epithelial carcinoma cell line, NIH-3T3 mouse embryonic fibroblast cell line, and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 0.1 µg/mL of Mouse Anti-Human Annexin A4 Monoclonal Antibody (Catalog # MAB4146) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Annexin A4 at approximately 36 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 2</i>.</p>	<p>Immunohistochemistry</p>  <p>Annexin A4 in Human Kidney. Annexin A4 was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human Annexin A4 Monoclonal Antibody (Catalog # MAB4146) 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 cell membranes and the nuclear envelope of epithelial cells in convoluted tubules. View our protocol for <i>Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</i>.</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

Annexin A4 (ANXA4), also known as Lipocortin IV, placental anticoagulant protein II, and zymogen granule membrane-associated protein of 36 kDa (ZAP36), is a member of the Annexin protein family. Annexins are calcium-dependent phospholipid-binding proteins that are preferentially located on the cytosolic face of the plasma membrane. The Annexins consist of a unique N-terminal domain followed by a homologous C-terminal core domain containing the phospholipid-binding sites. The C-terminal domain is comprised of four 60-70 aa annexin repeats which form a tightly packed disc known as the annexin domain. Members of the Annexin family play a role in cytoskeletal interactions, phospholipase inhibition, regulation of cellular growth, and intracellular signal transduction pathways. Human Annexin A4 shares 92% aa sequence identity with mouse and rat Annexin A4.