

## DESCRIPTION

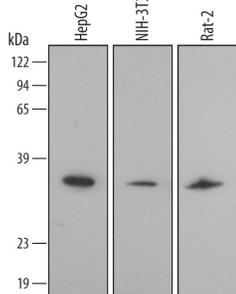
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse, and rat Annexin A4 in Western blots. In Western blots, this antibody shows no cross-reactivity with recombinant human Annexin A1, A2, A3, A5, A6, A7, A8, A9, A10, A11 or A13.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Annexin A4 Met1-Asp321 Accession # NP_001144
<b>Formulation</b>	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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human/Mouse/Rat Annexin A4 by Western Blot.</b> Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, NIH-3T3 mouse embryonic fibroblast cell line, and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 1 µg/mL of Human/Mouse/Rat Annexin A4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4146) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Annexin A4 at approximately 36 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Annexin A4 in Human Kidney.</b> Annexin A4 was detected in immersion fixed paraffin-embedded sections of human kidney using Human/Mouse/Rat Annexin A4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4146) 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-Goat HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membranes, cytoplasm and nuclei. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Annexin A4 (ANXA4), also known as Lipocortin IV, placental anticoagulant protein II and zymogen granule membrane-associated protein, 36 kDa (ZAP36), is a 321 amino acid, 36 kDa member of the Annexin protein family. Annexins are a family of Calcium-dependent phospholipid-binding proteins that are preferentially located on the cytosolic face of the plasma membrane. The Annexin's have a molecular weight of approximately 35 to 40 kDa and consist of a unique amino terminal domain followed by a homologous C-terminal core domain containing the calcium-dependent phospholipid-binding sites. The C terminal domain is comprised of four 60-70 amino acid repeats, known as annexin repeats or an endonexin fold (Annexin A6 contains 8 annexin repeats). The four annexin repeats form a highly  $\alpha$ -helical, tightly packed disc known as the annexin domain, which binds to phospholipids in the membrane in a calcium-dependent manner. 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% identity with mouse and rat Annexin A4.