

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	The antibody detects human, mouse and rat Annexin A1 in Western blots. In Western blots, goat anti-human/mouse/rat Annexin A1 does not cross-react with recombinant human Annexin A2, A3, A4, A6, A7, A8, A9, A10, A11 or A13.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Annexin A1 Met1-Asn346 Accession # P04083
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.

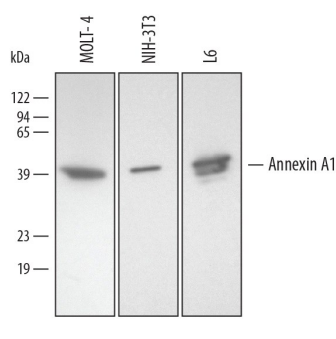
APPLICATIONS

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	0.2 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	2 µg/mL	See Below

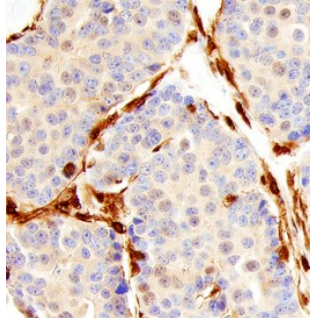
DATA

Western Blot



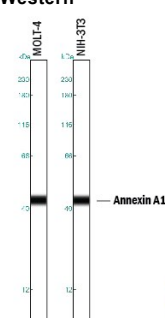
Detection of Human/Mouse/Rat Annexin A1 by Western Blot. Western blot shows lysates of MOLT-4 human acute lymphoblastic leukemia cell line, NIH-3T3 mouse embryonic fibroblast cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 0.2 µg/mL of Goat Anti-Human/Mouse/Rat Annexin A1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3770) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Annexin A1 at approximately 35-40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Immunohistochemistry




Annexin A1/Annexin I in Human Breast. Annexin A1/Annexin I was detected in immersion fixed paraffin-embedded sections of human breast using Goat Anti-Human/Mouse/Rat Annexin A1/Annexin I Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3770) 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 & Tissue Staining Kit (brown; Catalog # CTS008) and counter-stained with hematoxylin (blue). Specific staining was localized to stromal cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human and Mouse Annexin A1 by Simple Western™. Simple Western lane view shows lysates of MOLT-4 human acute lymphoblastic leukemia cell line and NIH-3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for Annexin A1 at approximately 44 kDa (as indicated) using 2 µg/mL of Goat Anti-Human/Mouse/Rat Annexin A1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3770) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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 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 α -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. Annexin A1 (ANXA1), also known as annexin I, lipocortin I, and calpactin II, is an ~ 40 kDa protein with phospholipase A2 inhibitory activity. Since phospholipase A2 is required for the biosynthesis of the potent mediators of inflammation, prostaglandins and leukotrienes, Annexin A1 may have anti-inflammatory activity. Human Annexin A1 shares 88 and 89% identity with mouse and rat Annexin A1, respectively.