

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Annexin A1 in direct ELISAs and human, mouse, and rat Annexin A1 in Western blots. In direct ELISAs, approximately 25%-50% cross-reactivity with recombinant human (rh) Annexin A2 is observed and no cross-reactivity with rhAnnexin A3, A6, or A11 is observed. In Western blots, no cross-reactivity with rhAnnexin A6 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 686122
Purification	Protein A or G purified from hybridoma culture supernatant
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

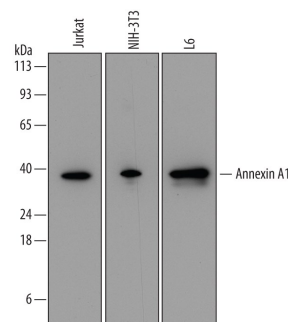
APPLICATIONS

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	0.1 µg/mL	See Below
Simple Western	1 µg/mL	See Below
Knockout Validated	Annexin A1 is specifically detected in NIH-3T3 mouse embryonic fibroblast parental cell line but is not detectable in Annexin A1 knockout NIH-3T3 cell line.	

DATA

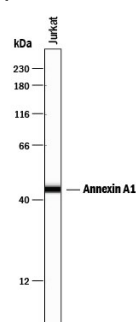
Western Blot



Detection of Human, Mouse, and Rat Annexin A1 by Western Blot.

Western blot shows lysates of Jurkat human acute T cell leukemia cell line, NIH-3T3 mouse embryonic fibroblast cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 0.1 µg/mL of Mouse Anti-Human/Mouse Annexin A1 Monoclonal Antibody (Catalog # MAB37701) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Annexin A1 at approximately 39 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 2](#).

Simple Western

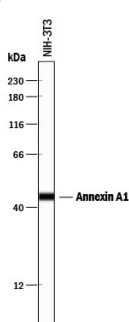


Detection of Human Annexin A1 by Simple Western™.

Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for Annexin A1 at approximately 45 kDa (as indicated) using 1 µg/mL of Mouse Anti-Human/Mouse/Rat Annexin A1 Monoclonal Antibody (Catalog # MAB37701). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Simple Western

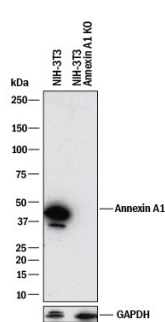


Detection of Mouse Annexin A1 by Simple Western™.

Simple Western lane view shows lysates of NIH-3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for Annexin A1 at approximately 45 kDa (as indicated) using 1 µg/mL of Mouse Anti-Human/Mouse/Rat Annexin A1 Monoclonal Antibody (Catalog # MAB37701). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Knockout Validated



Western Blot Shows Mouse Annexin A1 Specificity by Using Knockout Cell Line.

Western blot shows lysates of NIH-3T3 mouse embryonic fibroblast parental cell line and Annexin A1 knockout NIH-3T3 cell line (KO). PVDF membrane was probed with 0.1 µg/mL of Mouse Anti-Human/Mouse/Rat Annexin A1 Monoclonal Antibody (Catalog # MAB37701) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Annexin A1 at approximately 38 kDa (as indicated) in the parental NIH-3T3 cell line, but is not detectable in knockout NIH-3T3 cell line. GAPDH (Catalog # MAB5718) is shown as a loading control. This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

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.

- 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 Annexins 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% amino acid sequence identity with mouse and rat Annexin A1, respectively.