

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Annexin A1 in direct ELISAs. Detects human and mouse Annexin A1 in Western blots. In direct ELISAs, no cross-reactivity with recombinant human Annexin A2, A3, A4, A6, A7, A8, A9, A10, A11, or A13 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 686106
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.

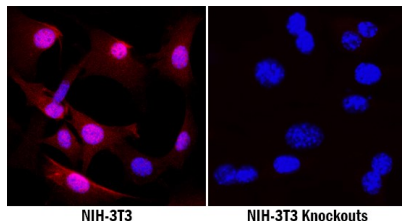
APPLICATIONS

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
Immunocytochemistry	3-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Knockout Validated	Annexin A1 is specifically detected in NIH- 3T3 mouse embryonic fibroblast cell lineparental cell line but is not detectable in Annexin A1 knockout NIH- 3T3 cell line.	

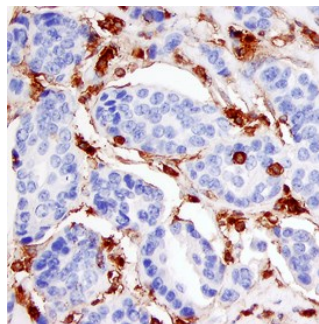
DATA

Immunocytochemistry



Annexin A1 in NIH-3T3 Mouse Cell Line. Annexin A1 was detected in immersion fixed NIH-3T3 mouse embryonic fibroblast cell line (left panel, positive stain) and NIH-3T3 Knockouts (right panel, negative stain) using Mouse Anti-Human/Mouse Annexin A1 Monoclonal Antibody (Catalog # MAB3770) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei, cytoplasm and plasma membrane. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Annexin A1 in Human Breast. Annexin A1 was detected in immersion fixed paraffin-embedded sections of human breast using Mouse Anti-Human/Mouse Annexin A1 Monoclonal Antibody (Catalog # MAB3770) 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 myoepithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

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 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.