

Basic Information

Product Name	Anti-Annexin A1/ANXA1 Antibody (Clone#6B7F8)	
Gene Name	ANXA1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG2b	
Species Reactivity	human	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Annexin A1 recombinant protein (Position: A2-N346). Human Annexin A1 shares 88% and 89% amino acid (aa) sequence identity with mouse and rat Annexin A1, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	39 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

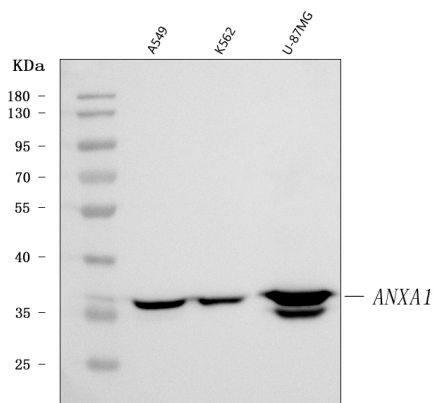
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

ANXA1, also known as lipocortin I or Annexin A1, is a protein that in humans is encoded by the ANXA1 gene. It is mapped to 9q21.13. ANXA1 belongs to a family of Ca(2+)-dependent phospholipid binding proteins which have a molecular weight of approximately 35,000 to 40,000 and are preferentially located on the cytosolic face of the plasma membrane. ANXA1 protein has an apparent relative molecular mass of 40 kDa, with phospholipase A2 inhibitory activity. Lower peptide concentrations possibly found in inflammatory situations elicit Ca(2+) transients without fully activating the mitogen-activated protein kinase pathway. This causes a specific inhibition of the transendothelial migration of neutrophils and a desensitization of neutrophils toward a chemoattractant challenge. These findings identified ANXA1 peptides as novel, endogenous FPR ligands and established a mechanistic basis of ANXA1-mediated antiinflammatory effects.

Selected Validation Data



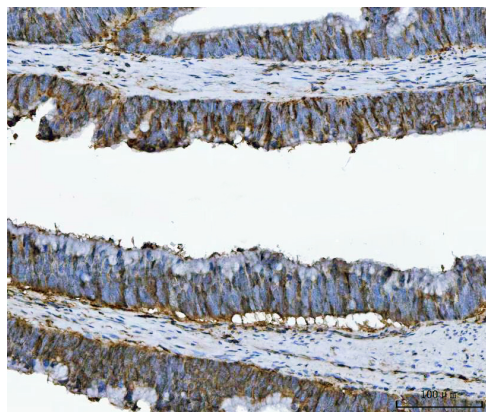
Western blot analysis of Annexin A1/ANXA1 using anti-Annexin A1/ANXA1 antibody (M01451-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,

Lane 2: human K562 whole cell lysates,

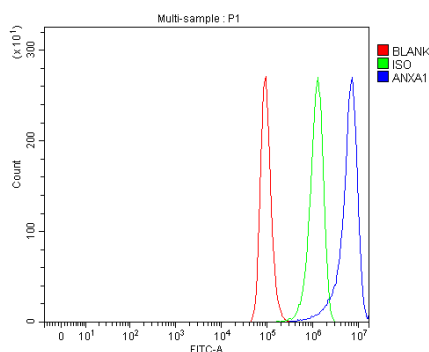
Lane 3: human U-87 MG whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Annexin A1/ANXA1 antigen affinity purified monoclonal antibody (M01451-3) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Annexin A1/ANXA1 at approximately 39 kDa. The expected band size for Annexin A1/ANXA1 is at 39 kDa.



IHC analysis of Annexin A1/ANXA1 using anti-Annexin A1/ANXA1 antibody (M01451-3).

Annexin A1/ANXA1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. The tissue section was incubated with mouse anti-Annexin A1/ANXA1 Antibody (M01451-3) at a dilution of 1:200 and developed using HRP Conjugated mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of A549 cells using anti-Annexin A1/ANXA1 antibody (M01451-3).

Overlay histogram showing A549 cells stained with M01451-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Annexin A1/ANXA1 Antibody (M01451-3) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C.

**Anti-Annexin A1/ANXA1 Antibody
(Clone#6B7F8)**

Catalog Number: M01451-3

Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.