

**Anti-Annexin A1 Antibody**  
**Catalog # ABO10501****Specification**

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**Anti-Annexin A1 Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P              |
| Primary Accession | <a href="#">P04083</a> |
| Host              | Rabbit                 |
| Reactivity        | Human                  |
| Clonality         | Polyclonal             |
| Format            | Lyophilized            |

**Description**

Rabbit IgG polyclonal antibody for Annexin A1(ANXA1) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Annexin A1 Antibody - Additional Information**

**Gene ID** 301

**Other Names**

Annexin A1, Annexin I, Annexin-1, Calpactin II, Calpactin-2, Chromobindin-9, Lipocortin I, Phospholipase A2 inhibitory protein, p35, ANXA1, ANX1, LPC1

**Calculated MW**

38714 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Nucleus . Cytoplasm . Cell projection, cilium . Basolateral cell membrane . Found in the cilium, nucleus and basolateral cell membrane of ciliated cells in the tracheal endothelium. Found in the cytoplasm of type II pneumocytes and alveolar macrophages. .

**Protein Name**

Annexin A1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Annexin A1(3-24aa MVSEFLKQAWFIENEEQEYVQT).

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the annexin family.

**Anti-Annexin A1 Antibody - Protein Information**

**Name** ANXA1

**Synonyms** ANX1, LPC1

**Function**

Plays important roles in the innate immune response as effector of glucocorticoid-mediated responses and regulator of the inflammatory process. Has anti-inflammatory activity (PubMed: <a href="http://www.uniprot.org/citations/8425544" target="\_blank">8425544</a>). Plays a role in glucocorticoid-mediated down-regulation of the early phase of the inflammatory response (By similarity). Contributes to the adaptive immune response by enhancing signaling cascades that are triggered by T-cell activation, regulates differentiation and proliferation of activated T-cells (PubMed: <a href="http://www.uniprot.org/citations/17008549" target="\_blank">17008549</a>). Promotes the differentiation of T-cells into Th1 cells and negatively regulates differentiation into Th2 cells (PubMed: <a href="http://www.uniprot.org/citations/17008549" target="\_blank">17008549</a>). Has no effect on unstimulated T cells (PubMed: <a href="http://www.uniprot.org/citations/17008549" target="\_blank">17008549</a>). Negatively regulates hormone exocytosis via activation of the formyl peptide receptors and reorganization of the actin cytoskeleton (PubMed: <a href="http://www.uniprot.org/citations/19625660" target="\_blank">19625660</a>). Has high affinity for Ca(2+) and can bind up to eight Ca(2+) ions (By similarity). Displays Ca(2+)-dependent binding to phospholipid membranes (PubMed: <a href="http://www.uniprot.org/citations/2532504" target="\_blank">2532504</a>, PubMed: <a href="http://www.uniprot.org/citations/8557678" target="\_blank">8557678</a>). Plays a role in the formation of phagocytic cups and phagosomes. Plays a role in phagocytosis by mediating the Ca(2+)-dependent interaction between phagosomes and the actin cytoskeleton (By similarity).

**Cellular Location**

Nucleus. Cytoplasm. Cell projection, cilium {ECO:0000250|UniProtKB:P46193}. Cell membrane. Membrane; Peripheral membrane protein. Endosome membrane {ECO:0000250|UniProtKB:P07150}; Peripheral membrane protein {ECO:0000250|UniProtKB:P07150}. Basolateral cell membrane {ECO:0000250|UniProtKB:P51662}. Apical cell membrane {ECO:0000250|UniProtKB:P10107}. Lateral cell membrane {ECO:0000250|UniProtKB:P10107}. Secreted. Secreted, extracellular space. Cell membrane; Peripheral membrane protein; Extracellular side. Secreted, extracellular exosome. Cytoplasmic vesicle, secretory vesicle lumen. Cell projection, phagocytic cup {ECO:0000250|UniProtKB:P10107}. Early endosome {ECO:0000250|UniProtKB:P19619}. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P19619}; Peripheral membrane protein {ECO:0000250|UniProtKB:P19619}. Note=Secreted, at least in part via exosomes and other secretory vesicles. Detected in exosomes and other extracellular vesicles (PubMed:25664854). Alternatively, the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in the protein translocation from the cytoplasm into ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059). Detected in gelatinase granules in resting neutrophils (PubMed:10772777).

Secretion is increased in response to wounding and inflammation (PubMed:25664854). Secretion is increased upon T-cell activation (PubMed:17008549). Neutrophil adhesion to endothelial cells stimulates secretion via gelatinase granules, but foreign particle phagocytosis has no effect (PubMed:10772777). Colocalizes with actin fibers at phagocytic cups (By similarity). Displays calcium-dependent binding to phospholipid membranes (PubMed:2532504, PubMed:8557678) {ECO:0000250|UniProtKB:P10107, ECO:0000269|PubMed:10772777, ECO:0000269|PubMed:17008549, ECO:0000269|PubMed:2532504, ECO:0000269|PubMed:25664854, ECO:0000269|PubMed:32272059, ECO:0000269|PubMed:8557678}

### Tissue Location

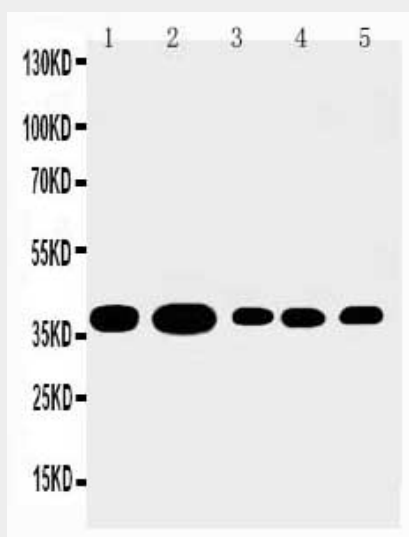
Detected in resting neutrophils (PubMed:10772777). Detected in peripheral blood T-cells (PubMed:17008549). Detected in extracellular vesicles in blood serum from patients with inflammatory bowel disease, but not in serum from healthy donors (PubMed:25664854) Detected in placenta (at protein level) (PubMed:2532504). Detected in liver.

### Anti-Annexin A1 Antibody - Protocols

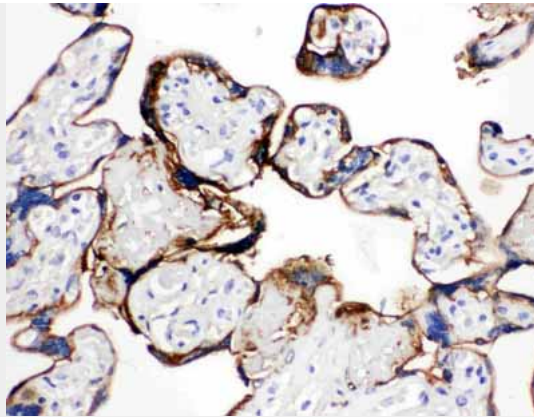
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

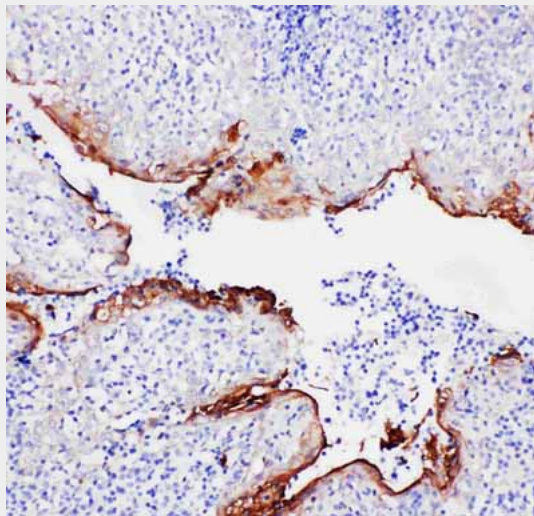
### Anti-Annexin A1 Antibody - Images



Anti-Annexin A1 antibody, ABO10501, Western blotting  
Lane 1: U87 Cell Lysate  
Lane 2: HELA Cell Lysate  
Lane 3: PANC Cell Lysate  
Lane 4: COLO320 Cell Lysate  
Lane 5: SMMC Cell Lysate



Anti-Annexin A1 antibody, ABO10501, IHC(P)IHC(P): Human Placenta Tissue



Anti-Annexin A1 antibody, ABO10501, IHC(P)IHC(P): Human Tonsil Tissue

#### **Anti-Annexin A1 Antibody - Background**

Annexin I, also known as lipocortin I (Lipo1), belongs to the family of annexins. These proteins are thought to control the biosynthesis of the potent mediators of inflammation, prostaglandins and leukotrienes. In two lipocortins (I and II) a short amino-terminal sequence distinct from the core structure has potential regulatory functions which are dependent on its phosphorylation state. The gene in the mouse encodes a protein of 346 amino acid residues. Mouse Lipo1 gene spans about 17 kb and is divided into 13 exons. Annexin I gene, mapped to 9q11-q22, is located on mouse chromosome 19. Annexin I acts through the formyl peptide receptor on human neutrophils. Peptides derived from the unique N-terminal domain of annexin I serve as FPR ligands and trigger different signaling pathways in a dose-dependent manner.