

**Anti-Annexin A1 Picoband Antibody**  
**Catalog # ABO11828****Specification**

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

Application	IHC
Primary Accession	<a href="#">P04083</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

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

**Reconstitution**

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

**Anti-Annexin A1 Picoband 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(Frozen Section), 0.5-1 µg/ml, Mouse,  
-<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, 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 Na<sub>3</sub>.

**Immunogen**

E.coli-derived human Annexin A1 recombinant protein (Position: A2-N346). Human Annexin A1 shares 88% and 89% amino acid (aa) sequences identity with mouse and rat Annexin A1, respectively.

**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 Picoband 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: [8425544](http://www.uniprot.org/citations/8425544)). 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: [17008549](http://www.uniprot.org/citations/17008549)). Promotes the differentiation of T-cells into Th1 cells and negatively regulates differentiation into Th2 cells (PubMed: [17008549](http://www.uniprot.org/citations/17008549)). Has no effect on unstimulated T cells (PubMed: [17008549](http://www.uniprot.org/citations/17008549)). Negatively regulates hormone exocytosis via activation of the formyl peptide receptors and reorganization of the actin cytoskeleton (PubMed: [19625660](http://www.uniprot.org/citations/19625660)). 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: [2532504](http://www.uniprot.org/citations/2532504), PubMed: [8557678](http://www.uniprot.org/citations/8557678)). 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**

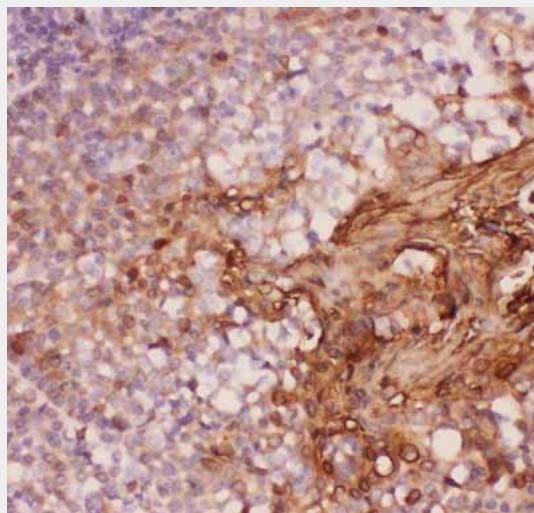
Detected in resting neutrophils (PubMed:10772777). Detected in peripheral blood T-cells (PubMed:17008549). Detected in extracellular vesicles in blood serum from patients with inflammatory bowel disease, but not in serum from healthy donors (PubMed:25664854) Detected in placenta (at protein level) (PubMed:2532504).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

#### **Anti-Annexin A1 Picoband Antibody - Protocols**

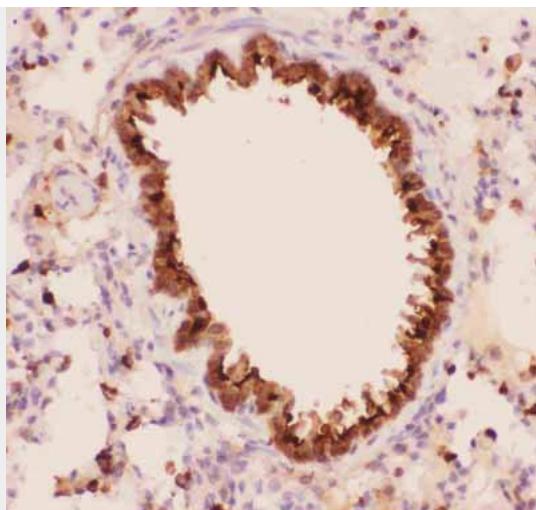
Provided below are standard protocols that you may find useful for product applications.

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

#### **Anti-Annexin A1 Picoband Antibody - Images**



Anti-Annexin A1 Picoband antibody, ABO11828-3.JPGIHC(P): Human Tonsil Tissue



Anti-Annexin A1 Picoband antibody, ABO11828-4.JPGIHC(P): Rat Lung Tissue

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

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  $\text{Ca}^{2+}$ -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  $\text{Ca}^{2+}$  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.