

# **ANXA1 Antibody**

Mouse Monoclonal Antibody (Mab) Catalog # AM2195c

#### **Product Information**

**Application** WB, IHC-P, E **Primary Accession** P04083 Reactivity Human Host Mouse Clonality Monoclonal Isotype IgG1 794CT2.2.1 **Clone Names Calculated MW** 38714

#### **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

Target/Specificity Purified His-tagged ANXA1 protein was used to produced this monoclonal

antibody.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein G column, followed by dialysis

against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**ANXA1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **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:<u>8425544</u>). 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). Promotes the differentiation of T-cells into Th1 cells and negatively regulates differentiation into Th2 cells (PubMed:17008549). Has no effect on unstimulated T cells (PubMed:17008549). Negatively regulates hormone exocytosis via activation of the formyl peptide receptors and reorganization of the actin cytoskeleton (PubMed: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, PubMed: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.

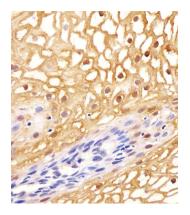
## **Background**

Calcium/phospholipid-binding protein which promotes membrane fusion and is involved in exocytosis. This protein regulates phospholipase A2 activity. It seems to bind from two to four calcium ions with high affinity.

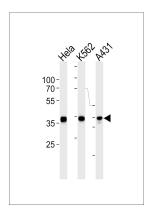
#### References

Wallner B.P., et al. Nature 320:77-81(1986). Kovacic R.T., et al. Biochemistry 30:9015-9021(1991). Arcone R., et al. Eur. J. Biochem. 211:347-355(1993). Varticovski L., et al. Biochemistry 27:3682-3690(1988). Biemann K., et al. Science 237:992-998(1987).

### **Images**



Immunohistochemical analysis of paraffin-embedded H. esophagus section using ANXA1 Antibody(Cat#AM2195C). AM2195C was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



ANXA1 Antibody(Cat. #AM2195c) western blot analysis in Hela,K562,A431 cell line lysates (35µg/lane).This demonstrates the ANXA1 antibody detected the ANXA1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.