

### ANXA1 Antibody (Ab-21)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50003

### Specification

# ANXA1 Antibody (Ab-21) - Product Information

Application	WB
Primary Accession	<u>P04083</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39 KDa
Antigen Region	8-39

## ANXA1 Antibody (Ab-21) - 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

Dilution WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20℃

#### ANXA1 Antibody (Ab-21) - 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.

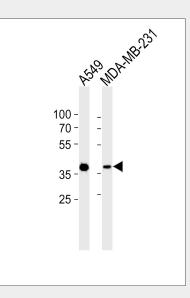
## ANXA1 Antibody (Ab-21) - Protocols

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

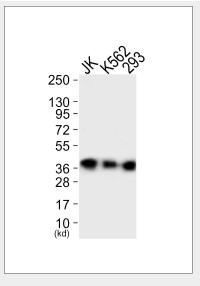
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety



#### • <u>Cell Culture</u> ANXA1 Antibody (Ab-21) - Images



Western blot analysis of lysates from A549,MDA-MB-231 cell line (from left to right),using ANXA1 Antibody (Ab-21)(B8290). B8290 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Western blot analysis of extracts from JK cells (Lane 1), K562 cells (Lane 2) and 293 cells (Lane 3), using ANXA1 (Ab-21) Antibody. The lane on the left is treated with synthesized peptide.

## ANXA1 Antibody (Ab-21) - 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.

## ANXA1 Antibody (Ab-21) - 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).