

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
Clone Names	794CT2.2.1
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 produce 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: 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). 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). In the context of antitumor immunity, interacts with FPR1 on dendritic cells allowing for tumor-associated antigens uptake and cross-presentation to T cells to mount an antitumor specific T cell response.

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.

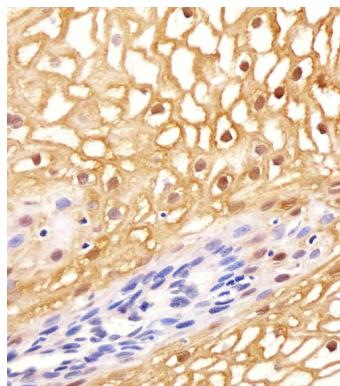
Background

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.

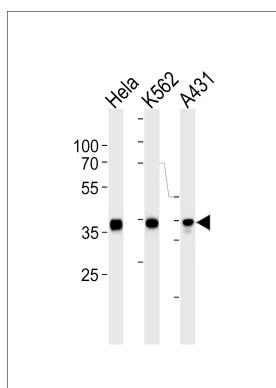
References

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 polyclonal antibody was used as the secondary, followed by DAB staining.



ANXA1 Antibody(Cat. #AM2195c) western blot analysis in HeLa,K562,A431 cell line lysates (35 μ g/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'.