

ANXA1 Ab

Cat.#: DF6254
Size: 100ul,200ul

Concn.: 1mg/ml
Source: Rabbit

Mol.Wt.: 39kDa
Clonality: Polyclonal

Application: WB 1:500-1:2000

Reactivity: Human, Mouse, Rat

Purification: The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Specificity: ANXA1 Ab detects endogenous levels of total ANXA1.

Immunogen: A synthesized peptide derived from human ANXA1.

Uniprot: P04083

Description: The annexin superfamily consists of 13 calcium or calcium and phospholipid binding proteins with high biological and structural homology (1). Annexin-1 (ANXA1) is the first characterized member of the annexin family of proteins and is able to bind to cellular membranes in a calcium-dependent manner, promoting membrane fusion and endocytosis (2-4). Annexin A1 has anti-inflammatory properties and inhibits phospholipase A2 activity (5,6). Annexin A1 can accumulate on internalized vesicles after EGF-stimulated endocytosis and may be required for a late stage in inward vesiculation (7). Phosphorylation by PKC, EGFR, and Chak1 results in inhibition of annexin A1 function (8-10). Annexin A1 has also been identified as one of the 'eat-me' signals on apoptotic cells that are to be recognized and ingested by phagocytes (11). Annexin A1, as an endogenous anti-inflammatory mediator, has roles in many diverse cellular functions, such as membrane aggregation, inflammation, phagocytosis, proliferation, apoptosis, and tumorigenesis and cancer development (12-14).

Subcellular Location: Nucleus. Cytoplasm. Cell projection > cilium. Basolateral cell membrane. Found in the cilium, nucleus and basolateral cell membrane of ciliated cells in the tracheal endothelium (By similarity). Found in the cytoplasm of type II pneumocytes and alveolar macrophages.

Tissue Specificity: 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

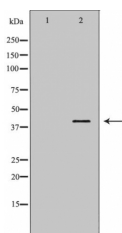
liver.

Similarity:

The full-length protein can bind eight Ca^{2+} ions via the annexin repeats. Calcium binding causes a major conformation change that modifies dimer contacts and leads to surface exposure of the N-terminal phosphorylation sites; in the absence of Ca^{2+} , these sites are buried in the interior of the protein core. The N-terminal region becomes disordered in response to calcium-binding. The N-terminal 26 amino acids are sufficient for its extracellular functions in the regulation of inflammation and wound healing (PubMed:25664854). Acylated peptides that contain the first 26 amino acids of the mature protein can activate signaling via the formyl peptide receptors (PubMed:15187149, PubMed:25664854). Belongs to the annexin family.

Storage Condition and Buffer:

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20°C . Stable for 12 months from date of receipt.



Western blot analysis of Hela using ANXA1 Ab. The lane on the left was treated with the antigen-specific peptide.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.

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