10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Annexin A2 Antibody

Catalog # AP50977

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P07355
Reactivity	Human, Mouse, Rat, Pig, Bovine, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38604

Additional Information

Gene ID	302
Other Names	ANX2; ANX2L4; CAL1H; LPC2D; Annexin A2; Annexin II; Annexin-2; Calpactin I heavy chain; Calpactin-1 heavy chain; Chromobindin-8; Lipocortin II; Placental anticoagulant protein IV; PAP-IV; Protein I; p36
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Annexin A2. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

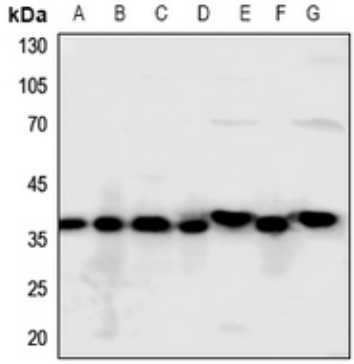
Name	ANXA2
Synonyms	ANX2, ANX2L4, CAL1H, LPC2D
Function	Calcium-regulated membrane-binding protein whose affinity for calcium is greatly enhanced by anionic phospholipids. It binds two calcium ions with high affinity. May be involved in heat-stress response. Inhibits PCSK9-enhanced LDLR degradation, probably reduces PCSK9 protein levels via a translational mechanism but also competes with LDLR for binding with PCSK9 (PubMed:18799458, PubMed:22848640, PubMed:24808179). Binds to endosomes damaged by phagocytosis of particulate wear debris and participates in endosomal membrane stabilization, thereby limiting NLRP3 inflammasome activation (By similarity). Required for endothelial cell surface plasmin generation and may support fibrinolytic surveillance and neoangiogenesis (By similarity).

Cellular Location	Secreted, extracellular space, extracellular matrix, basement membrane. Melanosome. Note=In the lamina beneath the plasma membrane. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Translocated from the cytoplasm to the cell surface through a Golgi-independent mechanism

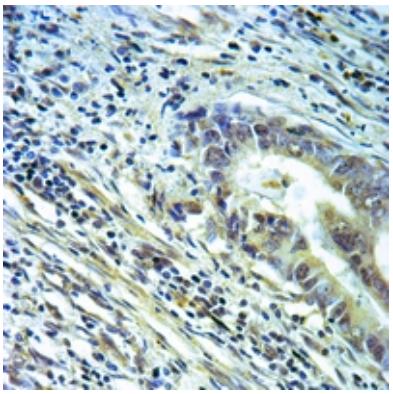
References

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Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
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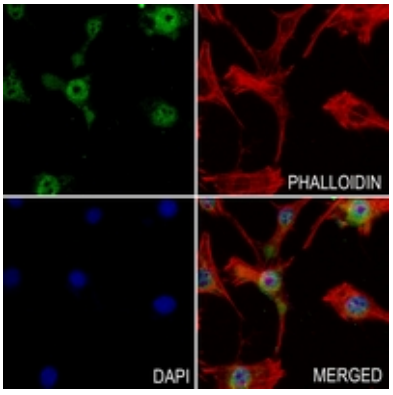
Images



Western blot analysis of Annexin A2 expression in HEK293T (A), Hela (B), H1688 (C), mouse lung (D), mouse liver (E), rat lung (F), rat liver (G) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 38 kD)



Immunohistochemical analysis of Annexin A2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Annexin A2 staining in NIH3T3 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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