

# Annexin A2

Mouse Monoclonal IgG1

IP-MS Validated

Cat. # AM0091

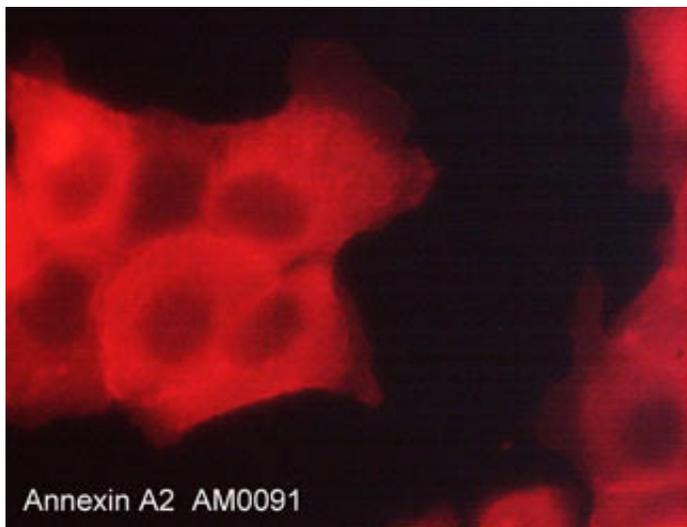
Size 100  $\mu$ l

## Background

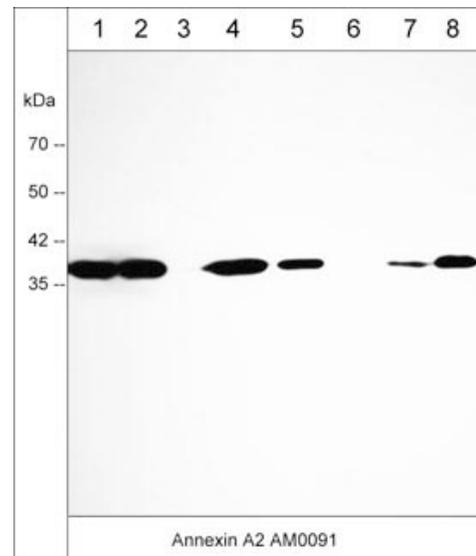
The Annexin family of is composed of at least thirteen mammalian genes (Annexin A1-13). These proteins are characterized by a conserved core domain which binds to phospholipids in a  $Ca^{2+}$ -dependent manner and a unique amino terminal region which may confer binding specificity. Annexins have roles in membrane fusion, endocytosis, secretion, and repair. Annexin A1 binds to cellular membranes in a calcium-dependent manner, promotes membrane fusion and endocytosis, and has been implicated as an anti-inflammatory mediator. Annexin A2 is a cytoskeletal calcium-dependent phospholipid binding protein, which has been shown to be a mediator of corticosteroid activity, a substrate for serine/threonine kinases and growth regulated tyrosine kinases, and may play a role in secretion. Annexin A5 is a PKC inhibitor, directly interacts with VEGFR2 receptor, and binds phosphatidylserine to inhibit blood coagulation. Annexin A6 reverses transformation of A431 cells after overexpression, and this effect may involve annexin A6 targeting of p120 RasGAP to the plasma membrane to inactivate Ras.

## Background References

- Feinberg, J.M. et al. (1991) *J Histochem & Cytochem.* 39:955.  
Feinberg, J.M. et al. (1991) *J Histochem & Cytochem.* 39:955.  
Grewal, T. & Enrich, C. (2006) *Bioessays* 28(12):1211.



Immunocytochemical labeling of Annexin A2 in paraformaldehyde fixed human A431 cells. The cells were labeled with mouse monoclonal anti-Annexin A2 (clone M009). The antibody was detected using goat anti-mouse DyLight<sup>®</sup> 594.



Western blot of human A431 (lane 1), MDA-MB-231 (lane 2), LNCaP (lane 3), MeWo (lane 4), HUVEC (lane 5), Jurkat (lane 6), K562 (lane 7), and PC3 (lane 8) cell lysates. The blot was probed with mouse monoclonal anti-Annexin A2 antibody (AM0091) at 1:500 (lanes 1-8).

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

# Annexin A2

## Mouse Monoclonal IgG1



<b>Cat. #</b> AM0091
<b>Size</b> 100 µl

### Immunogen

Clone M009 was generated from a proprietary antigen related to human Annexin A2 in MDA-MB-231 breast cancer cell line.

### Buffer and Storage

Mouse monoclonal, protein G purified antibody is supplied in 100 µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

#### Applications

WB	1:1000
ICC	1:100
ELISA	1:1000
IP-MS	1:100

#### Species Reactivity

Hu

End user should determine optimal dilution for their particular applications and experiments.

Western blot membranes were incubated with diluted antibody in 5% non-fat milk, Tris buffer, 0.04% Tween20 for 1 hour at room temperature.

Abbreviations: E = ELISA, ICC = immunocytochemistry, IHC = immunohistochemistry, IP = immunoprecipitation, MS = mass spectrometry, WB = western blot  
Hu = Human, Ms = Mouse, Rt = Rat, Ck = Chicken, F = Frog, B = Bovine

### Specificity

Clone M009 detects a 36 kDa\* protein corresponding to the molecular mass of Annexin A2 on SDS-PAGE immunoblots of human A431, MDA-MB-231, MeWo, HUVEC, and PC3 cells. The antibody also works for ELISA, immunocytochemical labeling, and immunoprecipitation applications. In addition, mass spectrometry analysis of immunoprecipitates using AM0091 in human A431 cell lysates confirms that this antibody only detects Annexin A2 protein.

\*All molecular weights (MW) are confirmed by comparison to MW standards and to western blot mobilities of known proteins with similar MW.

"Native" western blot utilizes non-reducing sample buffer (no mercaptoethanol or SDS), normal SDS-PAGE gel electrophoresis, and no methanol in transfer buffers.

### Related Products

- AM3301 Annexin A6 Mouse Monoclonal
- AM2981 Annexin A2 (C-terminal region) Mouse Monoclonal
- AK6060 Actin & Tubulin Antibody Sampler Kit
- OK7670 Organelle Marker Immunocytochemistry Kit
- RM3351 RasGAP Mouse Monoclonal
- AK6730 Annexin Family Antibody Sampler Kit

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

www.ecmbiosciences.com  
telephone: 859-879-2075  
toll-free: 1-800-859-8202  
info@ecmbiosciences.com

