

Anti-Annexin A3 Antibody Picoband™ (monoclonal, 2H3H8)

Catalog # ABO16580

Product Information

Application	WB, IHC, FC
Primary Accession	P12429
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Annexin A3 Antibody Picoband™ (monoclonal, 2H3H8) . Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Additional Information

Gene ID	306
Other Names	Annexin A3, 35-alpha calcimedin, Annexin III, Annexin-3, Inositol 1, 2-cyclic phosphate 2-phosphohydrolase, Lipocortin III, Placental anticoagulant protein III, PAP-III, ANXA3, ANX3
Calculated MW	36375
Application Details	Western blot, 0.25-0.5 µg/ml, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/ml, Human Flow Cytometry, 1-3 µg/1x10 ⁶ cells, Human
Source	Eukaryota
Contents	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Clone Names	Clone: 2H3H8
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Annexin A3, different from the related mouse sequence by one amino acid, and from the related rat sequence by three amino acids.
Purification	Immunogen affinity purified.
Storage	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.

Protein Information

Name	ANXA3
Synonyms	ANX3
Function	Inhibitor of phospholipase A2, also possesses anti-coagulant properties. Also cleaves the cyclic bond of inositol 1,2-cyclic phosphate to form inositol 1-phosphate.

Background

Annexin A3 is a protein that in humans is encoded by the Annexin A3 gene. The Annexin A3 gene contains 13 exons and spans 58 kb of genomic DNA. The Annexin A3 gene is mapped to 4q21. It is abnormally expressed in fetuses of both IVF and ICSI, which may contribute to the increase risk of birth defects in these ART. This gene encodes a member of the annexin family. Members of this calcium-dependent phospholipid-binding protein family play a role in the regulation of cellular growth and in signal transduction pathways. This protein functions in the inhibition of phospholipase A2 and cleavage of inositol 1,2-cyclic phosphate to form inositol 1-phosphate. This protein may also play a role in anti-coagulation.

Images

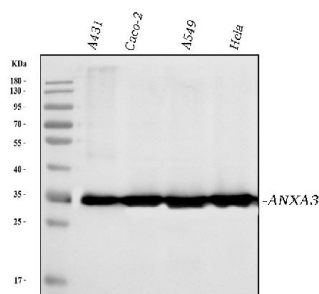


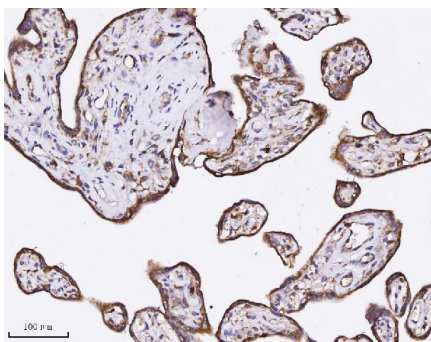
Figure 1. Western blot analysis of Annexin A3 using anti-Annexin A3 antibody (M04796-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates,
Lane 2: human CACO-2 whole cell lysates,
Lane 3: human A549 whole cell lysates,
Lane 4: human Hela whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Annexin A3 antigen affinity purified monoclonal antibody (Catalog # M04796-2) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Annexin A3 at approximately 36 kDa. The expected band size for Annexin A3 is at 36 kDa.

Figure 2. IHC analysis of Annexin A3 using anti-Annexin A3 antibody (M04796-2).

Annexin A3 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Annexin A3 Antibody (M04796-2)



overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

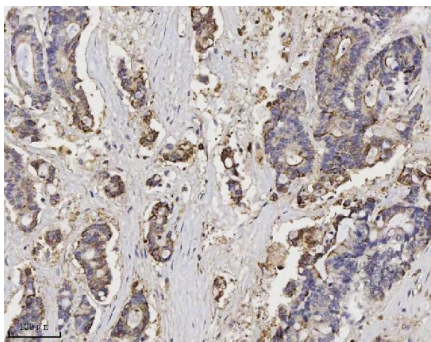


Figure 3. IHC analysis of Annexin A3 using anti-Annexin A3 antibody (M04796-2). Annexin A3 was detected in a paraffin-embedded section of human adenocarcinoma of the colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Annexin A3 Antibody (M04796-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

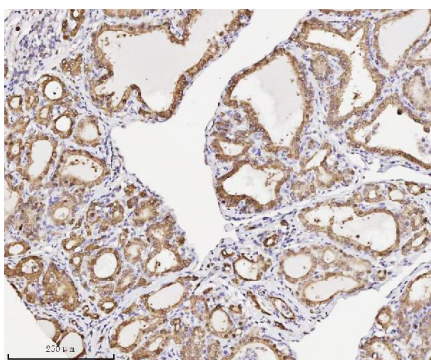


Figure 4. IHC analysis of Annexin A3 using anti-Annexin A3 antibody (M04796-2). Annexin A3 was detected in a paraffin-embedded section of human thyroid cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Annexin A3 Antibody (M04796-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

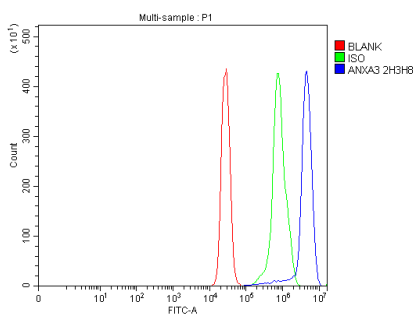


Figure 5. Flow Cytometry analysis of HepG2 cells using anti-Annexin A3 antibody (M04796-2). Overlay histogram showing HepG2 cells stained with M04796-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Annexin A3 Antibody (M04796-2, 1 µg/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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