

Rabbit anti-Mouse, Rat AKAP12 Polyclonal Antibody | anti-Akap12 antibody

Anti-AKAP12 Antibody

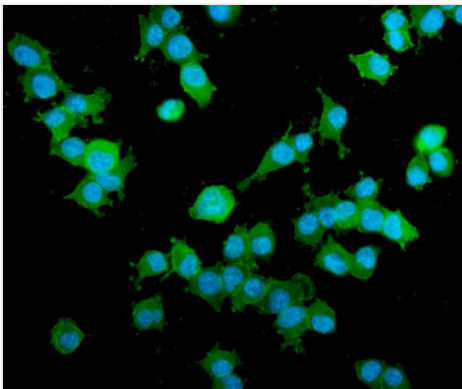
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125648	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

AKAP12; Polyclonal Antibody; Anti-AKAP12 Antibody; Akap12; Gag12; Ssecks; A-kinase anchor protein 12; AKAP-12; Germ cell lineage protein gercelin; Src-suppressed C kinase substrate; SSeCKS; A kinase (PRKA) anchor protein (gravin) 12; anti-Akap12 antibody

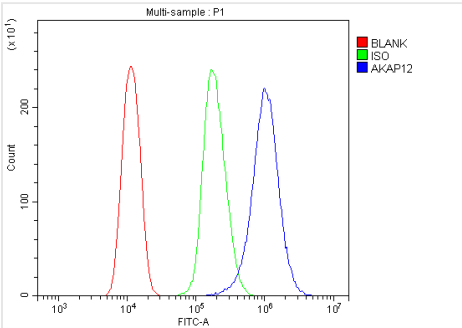
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for AKAP12 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-Akap12 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse AKAP12 recombinant protein (Position: E387-H1620).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



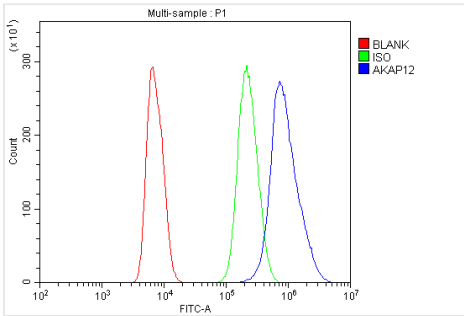
IF (Immunofluorescence)

Figure 5. IF analysis of AKAP12 using anti- AKAP12 antibody (AAA125648).AKAP12 was detected in immunocytochemical section of HEPA1-6 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti- AKAP12 Antibody (AAA125648) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



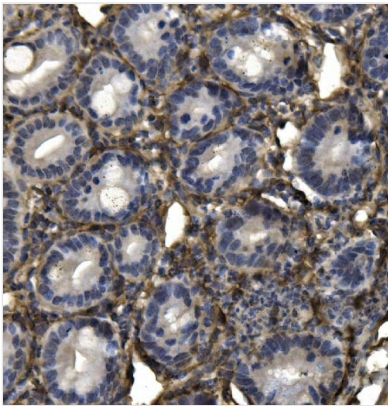
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HEPA1-6 cells using anti-AKAP12 antibody (AAA125648).Overlay histogram showing HEPA1-6 cells stained with AAA125648 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti- AKAP12 Antibody (AAA125648,1µg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



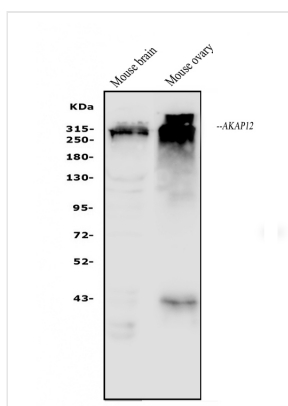
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of NRK cells using anti-AKAP12 antibody (AAA125648).Overlay histogram showing NRK cells stained with AAA125648 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-AKAP12 Antibody (AAA125648,1µg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of AKAP12 using anti-AKAP12 antibody (AAA125648).AKAP12 was detected in paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-AKAP12 Antibody (AAA125648) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of AKAP12 using anti-AKAP12 antibody (AAA125648). 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 50ug of sample under reducing conditions. Lane 1: mouse brain tissue lysates Lane 2: mouse ovary tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-AKAP12 antigen affinity purified polyclonal antibody (Catalog # AAA125648) at 0.25 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit 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 with Tanon 5200 system. A specific band was detected for AKAP12 at approximately 300KD. The expected band size for AKAP12 is at 181KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Akap12 antibody	A-kinase anchor protein 12, aka AKAP250, is an enzyme that in humans is encoded by the AKAP12 gene. The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins, which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. The encoded protein is expressed in endothelial cells, cultured fibroblasts, and osteosarcoma cells. It associates with protein kinase A and C and phosphatase, and serves as a scaffold protein in signal transduction. This protein and RII PKA colocalize at the cell periphery. This protein is a cell growth-related protein. Antibodies to this protein can be produced by patients with myasthenia gravis. Alternative splicing of this gene results in two transcript variants encoding different isoforms.
References	- Gordon, T., Grove, B., Loftus, J. C., O'Toole, T., McMillan, R., Lindstrom, J., Ginsberg, M. H. Molecular cloning and preliminary characterization of a novel cytoplasmic antigen recognized by myasthenia gravis sera. J. Clin. Invest. 90: 992-999, 1992. - Lee, S. -W., Kim, W. J., Choi, Y. K., Song, H. S., Son, M. J., Gelman, I. H., Kim, Y. -J., Kim, K. -W. SSeCKS regulates angiogenesis and tight junction formation in blood-brain barrier. Nature Med. 9: 900-906, 2003. - Nauert, J. B., Klauck, T. M., Langeberg, L. K., Scott, J. D. Gravin, an autoantigen recognized by serum from myasthenia gravis patients, is a kinase scaffold protein. Curr. Biol. 7: 52-62, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13626040
NCBI GeneID	83397
NCBI Accession #	NP_112462.1
NCBI GenBank Nucleotide #	NM_031185.3
UniProt Accession #	Q9WTQ5 ; Q80SS4 ; Q810D4 ; Q8BPK4 ; Q99MP1
Molecular Weight	169,743 Da
NCBI Official Full Name	A-kinase anchor protein 12
NCBI Official Synonym Full Names	A kinase (PRKA) anchor protein (gravin) 12

NCBI Official Symbol	Akap12
NCBI Official Synonym Symbols	Srcs5; SSeCKS; Tsga12; AI317366
NCBI Protein Information	A-kinase anchor protein 12
UniProt Protein Name	A-kinase anchor protein 12
UniProt Gene Name	Akap12
UniProt Synonym Gene Names	Gag12; Ssecks; AKAP-12; SSeCKS

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/akap12-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125648>