

Rabbit anti-Human ATG12 Polyclonal Antibody | anti-ATG12 antibody

Anti-ATG12 Antibody Picoband

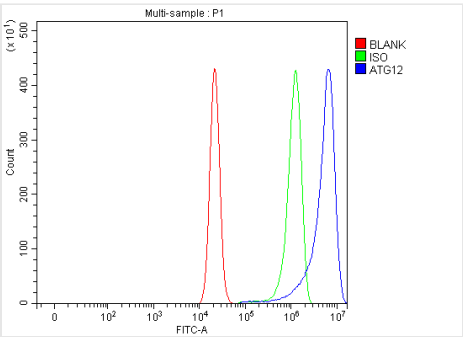
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127014	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

ATG12; Polyclonal Antibody; Anti-ATG12 Antibody Picoband; Fibrinogen alpha chain; fibrinogen alpha chain; FGA; anti-ATG12 antibody

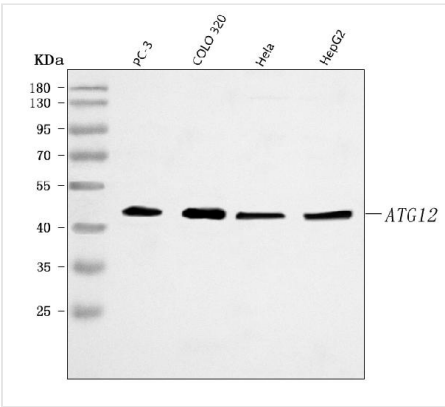
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Detected in blood plasma (at protein level).
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-ATG12 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human ATG12 recombinant protein (Position: M68-Q99).
Subcellular Localization	Secreted
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Cleaved by the protease thrombin to yield monomers which, together with fibrinogen beta (FGB) and fibrinogen gamma (FGG), polymerize to form an insoluble fibrin matrix. Fibrin has a major function in hemostasis as one of the primary components of blood clots. In addition, functions during the early stages of wound repair to stabilize the lesion and guide cell migration during re-epithelialization. Was originally thought to be essential for platelet aggregation, based on in vitro studies using anticoagulated blood. However, subsequent studies have shown that it is not absolutely required for thrombus formation in vivo. Enhances expression of SELP in activated platelets via an ITGB3-dependent pathway. Maternal fibrinogen is essential for successful pregnancy. Fibrin deposition is also associated with infection, where it protects against IFNG-mediated hemorrhage. May also facilitate the immune response via both innate and T-cell mediated pathways.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of RT4 cells using anti-ATG12 antibody (AAA127014). Overlay histogram showing RT4 cells stained with AAA127014 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ATG12 Antibody (AAA127014, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



WB (Western Blot)

Figure 1. Western blot analysis of ATG12 using anti-ATG12 antibody (AAA127014). 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 PC-3 whole cell lysates, Lane 2: human COLO 320 whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human HepG2 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 rabbit anti-ATG12 antigen affinity purified polyclonal antibody (#AAA127014) at 0.5ug/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 1:5000 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 ATG12 at approximately 48 kDa. The expected band size for ATG12 is at 15 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-ATG12 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-ATG12 antibody	Primary Antibodies; Signal Transduction
References	1. Mizushima, N., Sugita, H., Yoshimori, T., Ohsumi, Y. A new protein conjugation system in human: the counterpart of the yeast Apg12p conjugation system essential for autophagy. J. Biol. Chem. 273: 33889-33892, 1998.2. Tanida, I., Tanida-Miyake, E., Komatsu, M., Ueno, T., Kominami, E. Human Apg3p/Aut1p homologue is an authentic E2 enzyme for multiple substrates, GATE-16, GABARAP, and MAP-LC3, and facilitates the conjugation of hApg12p to hApg5p. J. Biol. Chem. 277: 13739-13744, 2002.3. Ueno, K., Kumagai, T., Kijima, T., Kishimoto, T., Hosoe, S. Cloning and tissue expression of cDNAs from chromosome 5q21-22 which is frequently deleted in advanced lung cancer. Hum. Genet. 102: 63-68, 1998.

NCBI AND UNIPROT INFORMATION

NCBI GI #	119569340
NCBI GeneID	9140
UniProt Accession #	O94817; Q6PJV2
Molecular Weight	7,746 Da
NCBI Official Full Name	ATG12 autophagy related 12 homolog (S. cerevisiae), isoform CRA_b
NCBI Official Synonym Full Names	autophagy related 12
NCBI Official Symbol	ATG12
NCBI Official Synonym Symbols	APG12; FBR93; APG12L; HAPG12

NCBI Protein Information	ubiquitin-like protein ATG12; Apg12 (autophagy, yeast) homolog; ATG12 autophagy related 12 homolog
UniProt Protein Name	Ubiquitin-like protein ATG12
UniProt Gene Name	ATG12
UniProt Synonym Gene Names	APG12; APG12L; APG12-like
UniProt Entry Name	ATG12_HUMAN

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/atg12-antibody-flow-cytometry-western-blot-elisa/127014>