

Rabbit anti-Human Caspase-3(p17)/CASP3 Polyclonal Antibody | anti-CASP3 antibody

Anti-Caspase-3(p17)/CASP3 Antibody Picoband

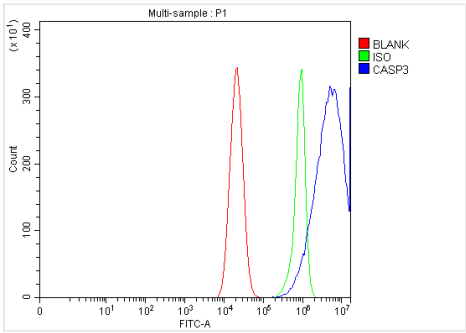
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126009	Rabbit	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

Caspase-3(p17)/CASP3; Polyclonal Antibody; Anti-Caspase-3(p17)/CASP3 Antibody Picoband; anti-CASP3 antibody

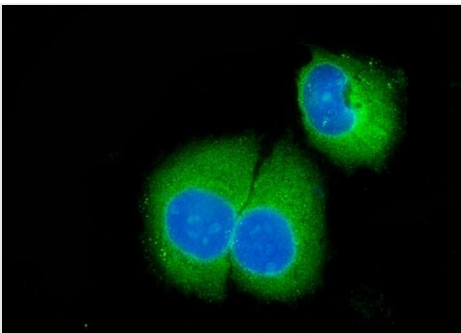
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
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 .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-CASP3 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	A synthetic peptide corresponding to a sequence of human Caspase-3(p17)/CASP3 (FRNLKYEVRNKNDLTREEIVELMR).
Preparation and Storage	Store 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.



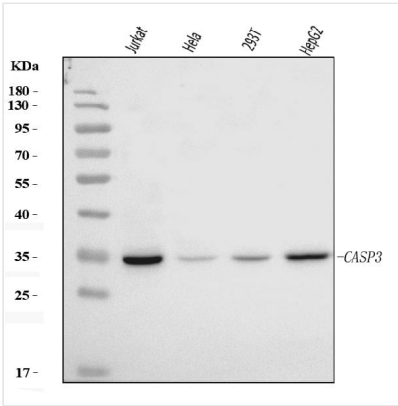
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of Caco-2 cells using anti-Caspase-3(P17)/CASP3 antibody (AAA126009).Overlay histogram showing Caco-2 cells stained with AAA126009 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caspase-3(P17)/CASP3 Antibody (AAA126009, 1 ug/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 (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of Caspase-3(P17)/CASP3 using anti-Caspase-3(P17)/CASP3 antibody (AAA126009).Caspase-3(P17)/CASP3 was detected in an immunocytochemical section of SiHa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-Caspase-3(P17)/CASP3 Antibody (AAA126009) overnight at 4 degree C. DyLight488 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.



WB (Western Blot)

Figure 1. Western blot analysis of Caspase-3(P17)/CASP3 using anti-Caspase-3(P17)/CASP3 antibody (AAA126009).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 Jurkat whole cell lysates,Lane 2: human Hela whole cell lysates,Lane 3: human 293T 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-Caspase-3(P17)/CASP3 antigen affinity purified polyclonal antibody (#AAA126009) at 0.5 ug/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 Caspase-3(P17)/CASP3 at approximately 32 kDa. The expected band size for Caspase-3(P17)/CASP3 is at 32 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CASP3 antibody	Caspase 3 is a caspase protein which interacts with Survivin, XIAP, CFLAR, Caspase 8, HCLS1, Deleted in Colorectal Cancer, TRAF3 and GroEL. This gene which is located on 4q35 encodes a protein that is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes that undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. And the caspase-3 activation in heart failure sequentially cleaves SRF and generates a truncated SRF that appears to function as a dominant-negative transcription factor. Additionally, the caspase-3 influence on bone mineral absorbance should be considered in any in vivo application of caspase-3 inhibitors to the treatment of human disease. In erythroid precursors undergoing terminal differentiation, Hsp70 prevents active CASP3 from cleaving GATA1 and inducing apoptosis.
Product Categories/Family for anti-CASP3 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	14790119
NCBI GeneID	836
NCBI Accession #	NP_004337.2
NCBI GenBank Nucleotide #	NM_004346.3
UniProt Accession #	P42574; Q96AN1; Q96KP2; A8K5M2; D3DP53
Molecular Weight	31,608 Da
NCBI Official Full Name	caspase-3 preproprotein
NCBI Official Synonym Full Names	caspase 3, apoptosis-related cysteine peptidase
NCBI Official Symbol	CASP3
NCBI Official Synonym Symbols	CPP32; SCA-1; CPP32B
NCBI Protein Information	caspase-3; CASP-3; CPP-32; apopain; procaspase3; protein Yama; PARP cleavage protease; cysteine protease CPP32; SREBP cleavage activity 1; caspase 3, apoptosis-related cysteine protease
UniProt Protein Name	Caspase-3
UniProt Gene Name	CASP3
UniProt Synonym Gene Names	CPP32; CASP-3; CPP-32; SCA-1
UniProt Entry Name	CASP3_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/caspase-3p17-casp3-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/126009>