Rabbit anti-Human, Rat Caspase-7/CASP7 Polyclonal Antibody | anti-CASP7 antibody

Anti-Caspase-7/CASP7 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19232	**Rabbit**	**Human, Rat**	**Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA**

PRODUCT SYNONYMS

Caspase-7/CASP7; Polyclonal Antibody; Anti-Caspase-7/CASP7 Antibody; CASP7; MCH3; Caspase-7; CASP-7; Apoptotic protease Mch-3; CMH-1; ICE-like apoptotic protease 3; ICE-LAP3 [Cleaved into: Caspase-7 subunit p20; Caspase-7 subunit p11]; caspase 7; anti-CASP7 antibody

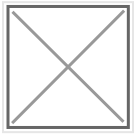
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Caspase-7/CASP7 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-CASP7 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.25-0.5ug/ml|Human, Rat| IHC-P: 2-5ug/ml|Human| ICC/IF: 5ug/ml|Human| FC/FACS/FCM: 1-3ug/1x106 cells|Human| Direct ELISA: 0.1-0.5ug/ml|Human|
Immunogen	E Coli-derived human Caspase-7/CASP7 recombinant protein (Position: A24-Q303).
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.

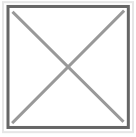
IMAGES

FCM (Flow Cytometry)
Figure 6. Flow Cytometry analysis of MCF-7 cells using anti-Caspase-7/CASP7 antibody (AAA19232).Overlay histogram showing MCF-7 cells stained with AAA19232 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caspase-7/CASP7 Antibody (AAA19232, 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 5. IHC analysis of Caspase-7/CASP7 using anti-Caspase-7/CASP7 antibody (AAA19232).Caspase-7/CASP7 was detected in paraffin-embedded section of human rectal cancer 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-Caspase-7/CASP7 Antibody (AAA19232) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 4. IHC analysis of Caspase-7/CASP7 using anti-Caspase-7/CASP7 antibody (AAA19232).Caspase-7/CASP7 was detected in paraffin-embedded section of human lung cancer 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-Caspase-7/CASP7 Antibody (AAA19232) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 3. IHC analysis of Caspase-7/CASP7 using anti-Caspase-7/CASP7 antibody (AAA19232).Caspase-7/CASP7 was detected in paraffin-embedded section of human gastric cancer 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-Caspase-7/CASP7 Antibody (AAA19232) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.

IHC (Immunohistochemistry)
Figure 2. IHC analysis of Caspase-7/CASP7 using anti-Caspase-7/CASP7 antibody (AAA19232).Caspase-7/CASP7 was detected in paraffin-embedded section of human breast cancer 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-Caspase-7/CASP7 Antibody (AAA19232) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.

WB (Western Blot)
Figure 1. Western blot analysis of Caspase-7/CASP7 using anti-Caspase-7/CASP7 antibody (AAA19232).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 30ug of sample under reducing conditions.Lane 1: human Jurkat whole cell lysatesLane 2: human HEK293 whole cell lysatesLane 3: human MCF-7 whole cell lysatesLane 4: human PC-3 whole cell lysatesLane 5: human T47D whole cell lysatesLane 6: human A549 whole cell lysatesLane 7: rat liver 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-Caspase-7/CASP7 antigen affinity purified polyclonal antibody (Catalog # AAA19232) at 0. 5 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 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system. A specific band was detected for Caspase-7/CASP7 at approximately 35KD. The expected band size for Caspase-7/CASP7 is at 35KD.

ADDITIONAL INFORMATION

Related Product Information for anti-CASP7 antibody	CASP7, Caspase-7, apoptosis-related cysteine peptidase, is a human protein encoded by the CASP7 gene. CASP7 orthologs have been identified in nearly all mammals for which complete genome data are available. CASP7 is a member of the caspase (cysteine aspartate protease) family of proteins, and has been shown to be an executioner protein of apoptosis. Using radiation hybrid mapping, the CASP7 gene was localized to human chromosome 10q25. 1-q25. 2. The orderly activation of CASP7 regulates microglia activation through a protein kinase C-delta (PRKCD)-dependent pathway.

References	1. Burguillos, M. A., Deierborg, T., Kavanagh, E., Persson, A., Hajji, N., Garcia-Quintanilla, A., Cano, J., Brundin, P., Englund, E., Venero, J. L., Joseph, B. Caspase signalling controls microglia activation and neurotoxicity. Nature 472: 319-324, 2011. 2. Soung, Y. H., Lee, J. W., Kim, H. S., Park, W. S., Kim, S. Y., Lee, J. H., Park, J. Y., Cho, Y. G., Kim, C. J., Park, Y. G., Nam, S. W., Jeong, S. W., Kim, S. H., Lee, J. Y., Yoo, N. J., Lee, S. H. Inactivating mutations of CASPASE-7 gene in human cancers. Oncogene 22: 8048-8052, 2003. 3. Tiso, N., Pallavicini, A., Muraro, T., Zimbello, R., Apolloni, E., Valle, G., Lanfranchi, G., Danieli, G. A. Chromosomal localization of the human genes, CPP32, Mch2, Mch3, and Ich-1, involved in cellular apoptosis. Biochem. Biophys. Res. Commun. 225: 983-989, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502581
NCBI GeneID	840
NCBI Accession #	NP_001218.1
NCBI GenBank Nucleotide #	NM_001227.4
UniProt Accession #	P55210; Q13364; Q53YD5; Q5SVL0; Q5SVL3; Q96BA0; B4DQU7; B5BU45; D3DRB8
Molecular Weight	34,277 Da
NCBI Official Full Name	caspase-7 isoform alpha
NCBI Official Synonym Full Names	caspase 7, apoptosis-related cysteine peptidase
NCBI Official Symbol	CASP7
NCBI Official Synonym Symbols	MCH3; CMH-1; LICE2; CASP-7; ICE-LAP3
NCBI Protein Information	caspase-7; apoptotic protease MCH-3; ICE-like apoptotic protease 3; caspase 7, apoptosis-related cysteine protease
UniProt Protein Name	Caspase-7
UniProt Gene Name	**CASP7**
UniProt Synonym Gene Names	MCH3; CASP-7; ICE-LAP3
UniProt Entry Name	CASP7_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-7-casp7-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-direct-elisa-elisa/19232