

Rabbit Caspase 3 Polyclonal Antibody | anti-CASP3 antibody

Phospho-Caspase 3 (Ser26) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31443	Rabbit	Human, Mouse, Rat Predicted Reactivity: Rabbit (88%)	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

Caspase 3; Polyclonal Antibody; Phospho-Caspase 3 (Ser26) Antibody; A830040C14Rik; Apopain; CASP-3; CASP3; CASP3_HUMAN; Casp3a; apoptosis-related cysteine peptidase; apoptosis-related cysteine protease; apoptosis-related cysteine protease a; Caspase-3 subunit p12; CC3; CPP-32; CPP32; CPP32B; Cysteine protease CPP32; EC 3.4.22.56; LICE; mldy; OTTHUMP00000165052; OTTHUMP00000165053; OTTHUMP00000165054; PARP cleavage protease; Procaspase3; protein Yama; SCA 1; SCA-1; SREBP cleavage activity 1; Yama; anti-CASP3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Rabbit (88%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-Caspase 3 (Ser26) Antibody detects endogenous levels of Caspase 3 only when phosphorylated at Ser26. Tissue Specificity: Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CASP3 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA (Peptide ELISA)
Application Notes	WB: 1:1000-3000 IF/ICC: 1:100-1:500 IHC: 1:50-1:200 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human Caspase 3 around the phosphorylation site of Ser26.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active subunits. Additional processing of the propeptides is likely due to the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and the large subunit of caspase-3 also occur and vice versa. S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating the denitrosylation of its active site thiol.
Subunit Structure	Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 17kDa (p17) and a 12kDa (p12) subunit. Interacts with BIRC6/bruce.

Similarity	Belongs to the peptidase C14A family.
Subcellular Location	Cytoplasm.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

At 1/100 staining Rat kidney tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

Staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Caspase 3 (Phospho-Ser26) using Rat kidney tissue lysates. -/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-CASP3 antibody	Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly (ADP-ribose) polymerase (PARP) at a '216-Asp[-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin. Triggers cell adhesion in sympathetic neurons through RET cleavage.
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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-3-antibody-western-blot-immunohistochemistry-immunofluorescence-immunocytochemistry-peptide-elisa-elisa/31443>