

Rabbit Caspase 9 Polyclonal Antibody | anti-CASP9 antibody

Phospho-Caspase 9 (Thr125) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321652	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Caspase 9; Polyclonal Antibody; Phospho-Caspase 9 (Thr125) Antibody; APAF-3; APAF3; Apoptosis related cysteine peptidase; Apoptotic protease Mch-6; Apoptotic protease-activating factor 3; CASP-9; CASP9; CASP9_HUMAN; Caspase 9 apoptosis related cysteine peptidase; Caspase 9 Dominant Negative; Caspase 9c; Caspase-9; Caspase-9 subunit p10; ICE LAP6; ICE like apoptotic protease 6; ICE-LAP6; ICE-like apoptotic protease 6; MCH6; PPP1R56; protein phosphatase 1; regulatory subunit 56; RNCASP9; anti-CASP9 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-Caspase 9 (Thr125) antibody detects endogenous levels of Caspase 9 only when phosphorylated at Threonine 125
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	416
Applicable Applications for anti-CASP9 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Caspase 9 around the phosphorylation site of Threonine 125
Tissue Specificity	Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep
Similarity	Pig (88%), Bovine (82%), Horse (91%), Sheep (90%)
Conjugation	Unconjugated
Epitope	Phospho Thr125
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of Phospho-Caspase 9 (Thr125) expression in various lysates



WB (Western Blot)
Western blot analysis of Caspase 9 phosphorylation expression in TNF treated HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA321652 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes 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)
AAA321652 at 1/100 staining human testis tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-CASP9 antibody

Description: This gene encodes a protein which 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 which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme.

Function: Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates caspase-3. Promotes DNA damage-induced apoptosis in a ABL1/c-Abl-dependent manner. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP).

Subunit Structure: Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 35 kDa (p35) and a 10 kDa (p10) subunit. Caspase-9 and APAF1 bind to each other via their respective NH2-terminal CED-3 homologous domains in the presence of cytochrome C and ATP. Interacts (inactive form) with EFHD2. Interacts with HAX1. Interacts with BIRC2/c-IAP1, XIAP/BIRC4, BIRC5/survivin, BIRC6/bruce and BIRC7/livin. Interacts with ABL1 (via SH3 domain); the interaction is direct and increases in the response of cells to genotoxic stress and ABL1/c-Abl activation. Interacts with NleF from pathogenic E.coli.

Post-translational Modifications: Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active subunits. Caspase-8 and-10 can also be involved in these processing events. Phosphorylated at Thr-125 by MAPK1/ERK2. Phosphorylation at Thr-125 is sufficient to block caspase-9 processing and subsequent caspase-3 activation. Phosphorylation on Tyr-153 by ABL1/c-Abl; occurs in the response of cells to DNA damage.

Similarity: Belongs to the peptidase C14A family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	14790124
NCBI GeneID	842
NCBI Accession #	NP_001220.2
NCBI GenBank Nucleotide #	NM_001229.4
UniProt Accession #	P55211; Q95348; Q53Y70; Q5JRU9; Q5UGI1; Q92852; Q9BQ62; Q9UEQ3; Q9UIJ8; B4E1A3
Molecular Weight	Observed: 47 kDa Predicted: 47 kDa
NCBI Official Full Name	caspase-9 isoform alpha
NCBI Official Synonym Full Names	caspase 9
NCBI Official Symbol	CASP9

NCBI Official Synonym Symbols	MCH6; APAF3; APAF-3; PPP1R56; ICE-LAP6
NCBI Protein Information	caspase-9
UniProt Protein Name	Caspase-9
UniProt Gene Name	CASP9
UniProt Synonym Gene Names	MCH6; CASP-9; APAF-3; ICE-LAP6

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-9-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/321652>