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Datasheet for 600-401-AE4

Caspase-9 Antibody

Overview

Description:	Anti-Caspase-9 (RABBIT) Antibody - 600-401-AE4
Item No.:	600-401-AE4
Size:	100 µg
Applications:	ELISA, IF, IHC, IP, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. A novel member in the caspase family was recently identified and designated ICE-LAP6, Mch6, and Apaf-3. Caspase-9 and Apaf-1 bind to each other, which leads to caspase-9 activation. Caspase-9 is also activated by granzyme B and CPP32. Activated caspase-9 cleaves and activates caspase-3 that is one of the key proteases, being responsible for the proteolytic cleavage of many key proteins in apoptosis. Caspase-9 play a central role in cell death induced by a wide variety of apoptosis activators including TNFa, TRAIL, anti-CD-95, FADD, and TRADD. Caspase-9 is expressed in a variety of human tissues.
Synonyms:	Caspase-9 Antibody, MCH6, APAF3, APAF-3, PPP1R56, ICE-LAP6, MCH6, Caspase-9, Apoptotic protease Mch-6, CASP-9
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CASP9
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Caspase-9 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 20 amino acid peptide near the internal region of human Caspase-9.
Purity/Specificity:	Anti-Caspase-9 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. It has no cross response to other members in caspase family.
Relevant Links:	• UniProtKB - P55211 • GeneID - 842 • NCBI - NP_001220.2

Application Details

Tested Applications:	ELISA, IF, IHC, IP, WB
Application Note:	Anti-Caspase-9 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry, Immunofluorescence, and Immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 46 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	20 µg/mL
IP:	User Optimized
WB:	1:1,000

Formulation

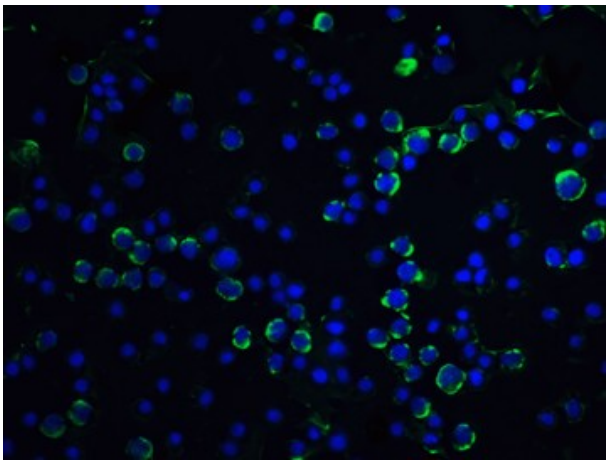
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

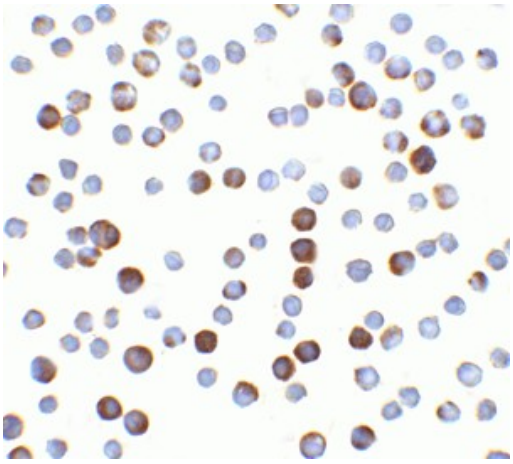
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

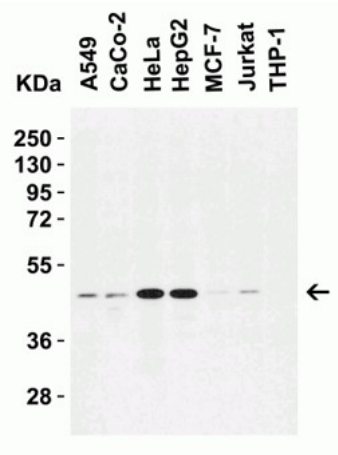
Images



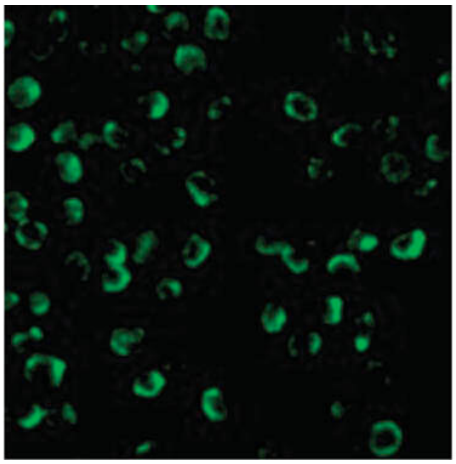
Immunofluorescence Microscopy
Immunofluorescence Validation of Caspase 9 in HeLa Cells. Immunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling Caspase 9at 5 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).



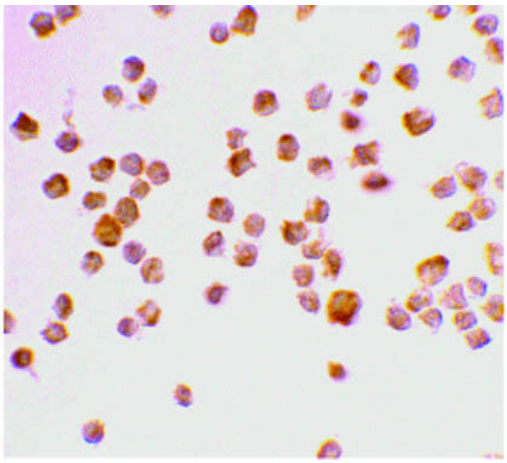
Immunocytochemistry
Immunocytochemistry Validation of Caspase 9 in HeLa Cells. Immunocytochemical analysis of HeLa cells using anti-Caspase 9 antibody at 5 µg/ml. Cells was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Western Blot
Western Blot Validation in Human Cell Lines. Loading: 15 µg of lysates per lane. Antibodies: Caspase 9, (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Caspase-9 antibody. Tissue: K562 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Caspase-9 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Caspase-9 is nuclear, mitochondrial, cytoplasmic, and apoptosomal. Staining: Caspase-9 as green fluorescent signal.



Immunocytochemistry
Immunocytochemistry of Caspase-9 antibody. Cells: K562. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Caspase-9 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Caspase-9 is nuclear, mitochondrial, cytoplasmic, and apoptosomal. Staining: Caspase-9 as precipitated brown signal with hematoxylin blue nuclear counterstain.



Western Blot

Western Blot of Caspase-9 antibody. Lane 1: HeLa whole cell lysate.. Load: 35 µg per lane. Primary antibody: Caspase-9 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 46.3 kDa, 46 kDa for Caspase-9. Other band(s): Caspase-9 splice variants and isoforms.

Disclaimer

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