

# Product datasheet

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# ARG20048 anti-Caspase 9 (cleaved) antibody

Package: 25 μg Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes Caspase 9 (cleaved)

Tested Reactivity Hu

Tested Application IP, WB

Specificity The anti-active caspase-9 antibody recognizes only the cleaved caspase-9 (37 kDa). It does not

recognize full-length caspase-9 or any other caspases.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Caspase 9 (cleaved)

Species Human

Immunogen Synthetic peptide mapping to the N-terminus adjacent to Asp330 of Human Caspase 9.

Conjugation Un-conjugated

Alternate Names APAF-3; ICE-LAP6; PPP1R56; CASP-9; Apoptotic protease-activating factor 3; Caspase-9; ICE-like

apoptotic protease 6; Apoptotic protease Mch-6; APAF3; MCH6; EC 3.4.22.62

## **Application Instructions**

Application table	Application	Dilution
	IP	10-20 μg/ml
	WB	0.5-4 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

#### **Properties**

Form Liquid

Purification Affinity Purified Antibody

Buffer PBS, 50% Glycerol, 0.5% BSA and 0.02% Thimerosal

Preservative 0.02% Thimerosal

Stabilizer 50% Glycerol, 0.5% BSA

Concentration 0.2 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

#### Bioinformation

Database links <u>GeneID: 842 Human</u>

Swiss-port # P55211 Human

Gene Symbol CASP9

Gene Full Name caspase 9, apoptosis-related cysteine peptidase

Background Caspases are synthesized as inactive pro-enzymes that are processed to active form in cells undergoing

apoptosis. Caspase-9 is an important member of the caspase family. Upon induction of apoptosis, Cytochrome c released from mitochondria associates with pro-caspase-9 (47 kDa) and Apaf-1. The complex processes pro-caspase-9 into a large subunit (37 kDa/17 kDa) and a small subunit (10 kDa). Cleaved caspase-9 further processes other caspases including caspase-3 and caspase-6, to initiate a caspase cascade leading to apoptosis. The affinity purified antibody recognizing the active forms of caspase-9 provides a new tool for identifying apoptotic cell populations in both tissue sections and

cultured cells.

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).

Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9. [UniProt]

Highlight Related Antibody Duos and Panels:

ARG30106 Mitochondria/Caspase Dependant Apoptosis Marker Antibody Duo (Caspase9, Cytochrome

<u>c)</u>

ARG30110 Mitochondria/Caspase dependant Apoptosis Antibody Panel (Caspase3, Caspase9,

Cytochrome c, PARP) (WB)

Related products:

<u>Caspase 9 antibodies;</u> <u>Caspase 9 Duos / Panels;</u> <u>Anti-Rabbit IgG secondary antibodies;</u>

Research Area Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Metabolism

antibody; Mitochondria/Caspase Dependant Apoptosis Marker antibody

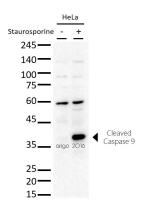
Calculated Mw 35-38 kDa (cleaved caspase 9)

PTM 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.



# ARG20048 anti-Caspase 9 (cleaved) antibody WB image

Western blot: 20  $\mu g$  of HeLa untreated or treated with Staurosporine and stained with ARG20048 anti-Caspase 9 (cleaved) antibody at 1:500 dilution.