

ARG44028 anti-Caspase 9 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Monoclonal antibody recognizes Caspase 9
Tested Reactivity	Hu, Ms
Tested Application	IP, WB
Host	Rabbit
Clonality	Monoclonal
Isotype	IgG
Target Name	Caspase 9
Species	Human
Immunogen	Synthetic peptide corresponding to amino-terminal residues adjacent to Asp315 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	1:50
	WB	1:500-1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	33 ~ 45 kDa	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide, 50% Glycerol and 0.4 - 0.5 mg/ml BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.4 - 0.5 mg/ml BSA
Concentration	0.5 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.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

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]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Metabolism antibody; Mitochondria/Caspase Dependant Apoptosis Marker antibody
Calculated Mw	46 kDa
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.

Images

