

## ARG42038 anti-Caspase 1 antibody [14F468]

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [14F468] recognizes Caspase 1
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	IHC-P, WB
Specificity	This antibody detects pro Caspase 1 at 45 kDa and the cleaved forms (p10) of Caspase 1 that contain aa. 371-390.
Host	Mouse
Clonality	Monoclonal
Clone	14F468
Isotype	IgG1
Target Name	Caspase 1
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 371-390 of Human Caspase 1 (within p10 fragment). (RKVRFSEQPDGRAQMPTE)
Conjugation	Un-conjugated
Alternate Names	Caspase-1; Interleukin-1 beta-converting enzyme; IL-1 beta-converting enzyme; CASP-1; ICE; IL-1BC; Interleukin-1 beta convertase; P45; IL1BC; p45; EC 3.4.22.36

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:100
	WB	1:250 - 1:1000
Application Note	WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 48 kDa	

### Properties

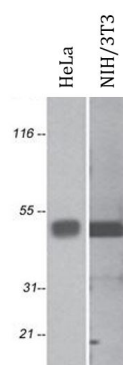
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS, 0.05% Sodium azide and 0.05% BSA.
Preservative	0.05% Sodium azide

Stabilizer	0.05% BSA
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 or below. 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	CASP1
Gene Full Name	caspase 1, apoptosis-related cysteine peptidase
Background	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. This gene was identified by its ability to proteolytically cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Mar 2012]
Function	Thiol protease that cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes. Important for defense against pathogens. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Can also promote apoptosis. [UniProt]
Highlight	Related products: <a href="#">Caspase 1 antibodies</a> ; <a href="#">Caspase 1 ELISA Kits</a> ; <a href="#">Caspase 1 Duos / Panels</a> ; <a href="#">Anti-Mouse IgG secondary antibodies</a> ; Related news: <a href="#">Exploring Antiviral Immune Response</a> <a href="#">RIP1 activation and pathogenesis of NASH</a>
Research Area	Pyroptosis Study antibody; NLRP3 Inflammasome Study antibody; NLRC4 Inflammasome Study antibody
Calculated Mw	45 kDa
PTM	The two subunits are derived from the precursor sequence by an autocatalytic mechanism. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

## Images



ARG42038 anti-Caspase 1 antibody [14F468] WB image

Western blot: HeLa and NIH/3T3 cell lysates stained with ARG42038 anti-Caspase 1 antibody [14F468] at 1:1000 dilution.