

## ARG41725 anti-Caspase 4 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes Caspase 4
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Caspase 4
Species	Mouse
Immunogen	Recombinant protein corresponding to E108-T195 of Mouse Caspase 4.
Conjugation	Un-conjugated
Alternate Names	Mih1/TX; Protease ICH-2; Caspase-4; EC 3.4.22.57; TX; CASP-4; Protease TX; ICE; ICH-2; ICE(rel)II; rel; ICEREL-II

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 43 kDa	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
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 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.

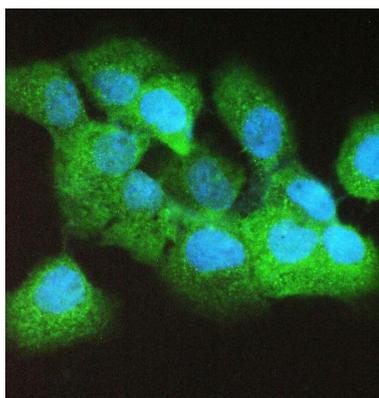
## Bioinformation

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Gene Symbol	CASP4
Gene Full Name	caspace 4, apoptosis-related cysteine peptidase
Background	This gene encodes a protein that 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 composed of a prodomain and a large and small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This caspase is able to cleave and activate its own precursor protein, as well as caspase 1 precursor. When overexpressed, this gene induces cell apoptosis. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]
Function	Involved in the activation cascade of caspases responsible for apoptosis execution. Involved in ER-stress induced apoptosis. Cleaves caspase-1. [UniProt]
Calculated Mw	43 kDa
PTM	In response to activation signals, including endoplasmic reticulum stress or treatment with amyloid beta A4 protein fragments (such as beta-amyloid protein 40), undergoes autoproteolytic cleavage. [UniProt]
Cellular Localization	Cytoplasm, cytosol. Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side. Mitochondrion. Inflammasome. Secreted. Note=Predominantly localizes to the endoplasmic reticulum (ER). Association with the ER membrane requires TMEM214 (PubMed:15123740). Released in the extracellular milieu by keratinocytes following UVB irradiation (PubMed:22246630). [UniProt]

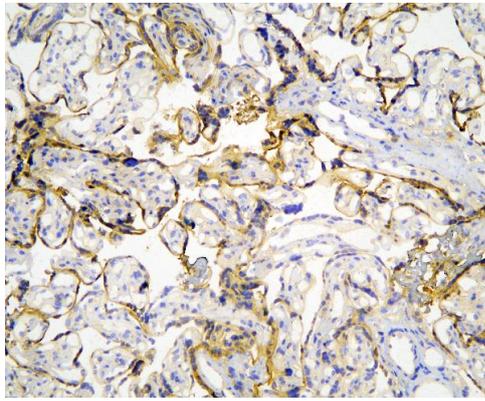
## Images

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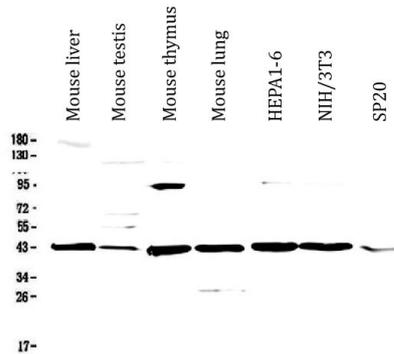
ARG41725 anti-Caspase 4 antibody ICC/IF image

Immunofluorescence: A431 cells stained with ARG41725 anti-Caspase 4 antibody at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



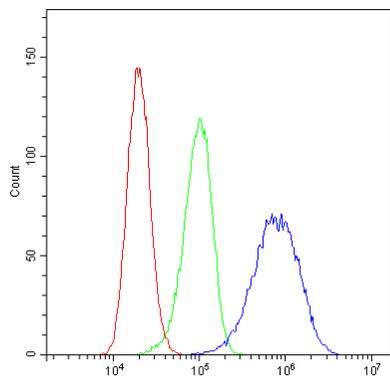
#### ARG41725 anti-Caspase 4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41725 anti-Caspase 4 antibody at 1 µg/ml dilution, overnight at 4°C.



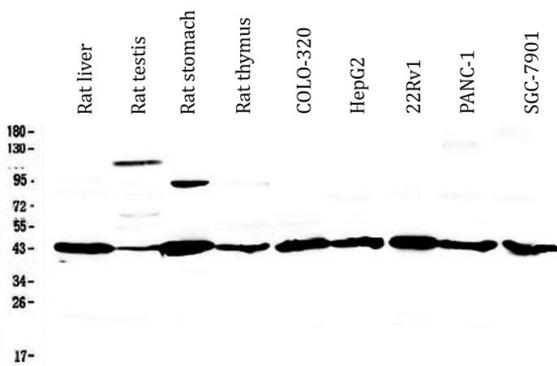
#### ARG41725 anti-Caspase 4 antibody WB image

Western blot: 50 µg of samples under reducing conditions. Mouse liver, Mouse testis, Mouse thymus, Mouse lung, HEPA1-6, NIH/3T3 and SP20 whole cell lysates stained with ARG41725 anti-Caspase 4 antibody at 0.5 µg/ml dilution, overnight at 4°C.



#### ARG41725 anti-Caspase 4 antibody FACS image

Flow Cytometry: A431 cells were blocked with 10% normal goat serum and then stained with ARG41725 anti-Caspase 4 antibody (blue) at 1 µg/10<sup>6</sup> cells for 30 min at 20°C, followed by incubation with DyLight<sup>®</sup>488 labelled secondary antibody. Isotype control antibody (green) and Rabbit IgG (1 µg/10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



#### ARG41725 anti-Caspase 4 antibody WB image

Western blot: 50 µg of samples under reducing conditions. Rat liver, Rat testis, Rat stomach, Rat thymus, COLO-320, HepG2, 22Rv1, PANC-1 and SGC-7901 whole cell lysates stained with ARG41725 anti-Caspase 4 antibody at 0.5 µg/ml dilution, overnight at 4°C.