

ARG55179 anti-Caspase 14 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Caspase 14
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Caspase 14
Species	Mouse
Immunogen	Synthetic peptide (16 aa) within the last 50 aa of Mouse Caspase-14.
Conjugation	Un-conjugated
Alternate Names	EC 3.4.22.-; CASP-14; Caspase-14

Application Instructions

Application table	Application	Dilution
	ELISA	Assay-dependent
	IHC-P	Assay-dependent
	WB	1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat Cell Lysate	

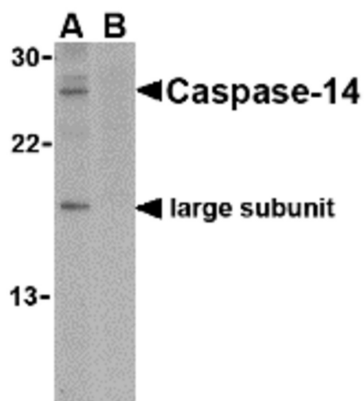
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 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

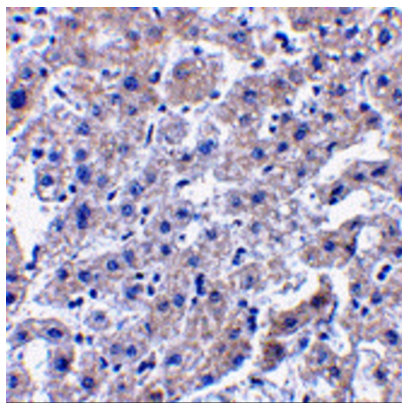
Database links	GeneID: 12365 Mouse GeneID: 23581 Human Swiss-port # O89094 Mouse Swiss-port # P31944 Human
Gene Symbol	Casp14
Gene Full Name	caspase 14
Background	Caspases are a family of cysteine proteases that can be divided into apoptotic and inflammatory caspase subfamilies. Unlike the apoptotic caspases, members of the inflammatory subfamily are generally not involved in cell death but are associated with the immune response to microbial pathogens. Members of this subfamily include caspase-1, -4, -5, and -12 and can activate proinflammatory cytokines such as IL-1b and IL-18. Caspase-14 is highly expressed in embryonic but not adult tissues. It is processed and activated by caspase 8 and caspase 10 in vitro, and by anti-Fas agonist antibody or TNF-related apoptosis inducing ligand in vivo. The expression and processing of this caspase may be involved in the keratinocyte terminal differentiation, which is important for the formation of the skin barrier.
Function	Non-apoptotic caspase which is involved in epidermal differentiation. Seems to play a role in keratinocyte differentiation and is required for cornification (PubMed:18156206). Regulates maturation of the epidermis by proteolytically processing filaggrin (PubMed:21654840). In vitro is equally active on the synthetic caspase substrates WEHD-ACF and IETD-AFC. Involved in processing of prosaposin in the epidermis (PubMed:24872419). May be involved in retinal pigment epithelium cell barrier function (By similarity). [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Cell Death antibody
Calculated Mw	28 kDa
PTM	Maturation by proteolytic processing appears to be a two-step process. The precursor is processed by KLK7 to yield the p20/p8 intermediate form which acts on the precursor to yield the p17/p10 mature form (PubMed:22825846). Initially, cleavage between Ile-152 and Lys-153 has been proposed to yield the large and small subunits of the active enzyme (PubMed:12200134).

Images



ARG55179 anti-Caspase 14 antibody WB image

Western blot: Jurkat cell lysate in the (A) absence or (B) presence of blocking peptide stained with ARG55179 anti-Caspase 14 antibody at 1 ug/ml dilution.



ARG55179 anti-Caspase 14 antibody IHC image

Immunohistochemistry: caspase-14 in Human liver tissue stained with ARG55179 anti-Caspase 14 antibody at 2.5 ug/ml dilution.