

ARG43383 anti-Caspase 14 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Caspase 14
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Caspase 14
Species	Human
Immunogen	Synthetic peptide derived from Human Caspase 14.
Conjugation	Un-conjugated
Alternate Names	EC 3.4.22.-; CASP-14; Caspase-14

Application Instructions

Application table	Application	Dilution
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	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.	
Positive Control	Human skin	
Observed Size	~ 28 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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.

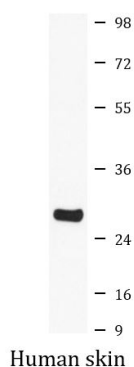
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CASP14
Gene Full Name	caspase 14, apoptosis-related cysteine peptidase
Background	This gene encodes 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 two subunits, large and small, that dimerize to form the active enzyme. This caspase has been shown to be 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 keratinocyte terminal differentiation, which is important for the formation of the skin barrier. [provided by RefSeq, Jul 2008]
Function	Non-apoptotic caspase involved in epidermal differentiation. Is the predominant caspase in epidermal stratum corneum (PubMed:15556625). Seems to play a role in keratinocyte differentiation and is required for cornification. Regulates maturation of the epidermis by proteolytically processing filaggrin (By similarity). In vitro has a preference for the substrate [WY]-X-X-D motif and is active on the synthetic caspase substrate WEHD-ACF (PubMed:16854378, PubMed:19960512). Involved in processing of prosaposin in the epidermis (By similarity). May be involved in retinal pigment epithelium cell barrier function (PubMed:25121097). Involved in DNA degradation in differentiated keratinocytes probably by cleaving DFFA/ICAD leading to liberation of DFFB/CAD (PubMed:24743736). [UniProt]
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). [UniProt]
Cellular Localization	Cytoplasm. Nucleus. [UniProt]

Images



ARG43383 anti-Caspase 14 antibody WB image

Western blot: Human skin lysate stained with ARG43383 anti-Caspase 14 antibody.