

# Product datasheet

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# ARG55190 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 WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name Caspase 14

Species Human

Immunogen Recombinant protein of Human Caspase-14 (NP\_036246.1)

Conjugation Un-conjugated

Alternate Names EC 3.4.22.-; CASP-14; Caspase-14

# **Application Instructions**

Application table	Application	Dilution	
	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	HepG2		

# **Properties**

Form Liquid

**Purification** Affinity purification with immunogen.

Buffer PBS (pH 7.3), 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

Database links GeneID: 12365 Mouse

GeneID: 23581 Human

Swiss-port # O89094 Mouse

Swiss-port # P31944 Human

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 substate [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]

Research Area Cell Biology and Cellular Response antibody; Cell Death antibody

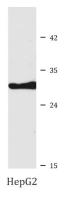
Calculated Mw 28 kDa

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**



#### ARG55190 anti-Caspase 14 antibody WB image

Western blot: HepG2 cell lysate stained with ARG55190 anti-Caspase 14 antibody.