

# Anti-Caspase-14 Rabbit Monoclonal Antibody

Catalog # ABO14042

## Specification

# Anti-Caspase-14 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description**  WB, IHC, IF, ICC, IP, FC <u>P31944</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-Caspase-14 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

## Anti-Caspase-14 Rabbit Monoclonal Antibody - Additional Information

Gene ID 23581

**Other Names** Caspase-14, CASP-14, 3.4.22.-, Caspase-14 subunit p17, mature form, Caspase-14 subunit p10, mature form, Caspase-14 subunit p20, intermediate form, Caspase-14 subunit p8, intermediate form, CASP14

Calculated MW 27680 MW KDa

Application Details WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

Subcellular Localization Cytoplasm. Nucleus.

#### **Tissue Specificity**

Expressed in keratinocytes of adult skin suprabasal layers (from spinous layers to the stratum granulosum and stratum corneum) (at protein level). Expressed in keratinocytes of hair shaft and sebaceous glands (at protein level). In psoriatic skin only expressed at very low levels (PubMed:11175259). The p17/10 mature form is expressed in epidermis stratum corneum, the p20/p8 intermediate form in epidermis upper granular cells of the stratum granulosum (PubMed:22825846)..

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Caspase-14



Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

# Anti-Caspase-14 Rabbit Monoclonal Antibody - Protein Information

Name CASP14

Function

Non-apoptotic caspase involved in epidermal differentiation. Is the predominant caspase in epidermal stratum corneum (PubMed:<a href="http://www.uniprot.org/citations/15556625" target="\_blank">15556625</a>). 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:<a

href="http://www.uniprot.org/citations/16854378" target="\_blank">16854378</a>, PubMed:<a href="http://www.uniprot.org/citations/19960512" target="\_blank">19960512</a>). Involved in processing of prosaposin in the epidermis (By similarity). May be involved in retinal pigment epithelium cell barrier function (PubMed:<a href="http://www.uniprot.org/citations/25121097" target="\_blank">25121097</a>). Involved in DNA degradation in differentiated keratinocytes probably by cleaving DFFA/ICAD leading to liberation of DFFB/CAD (PubMed:<a href="http://www.uniprot.org/citations/24743736" target=" blank">24743736</a>).

Cellular Location Cytoplasm. Nucleus

# Tissue Location

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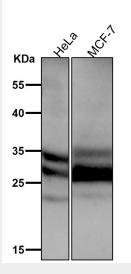
## Anti-Caspase-14 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

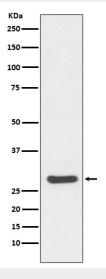
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Caspase-14 Rabbit Monoclonal Antibody - Images

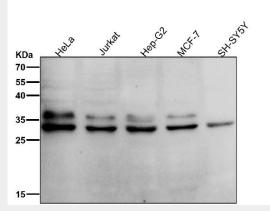




All lanes use the Antibody at 1:8K dilution for 1 hour at room temperature.



Western blot analysis of Caspase-14 expression in Human skin lysate.



All lanes use the Antibody at 1:8K dilution for 1 hour at room temperature.