

### **CASP14 Antibody (N-Term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21517a

## **Specification**

## **CASP14 Antibody (N-Term) - Product Information**

Application WB,E
Primary Accession P31944
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 27680

# CASP14 Antibody (N-Term) - Additional Information

## **Gene ID 23581**

#### **Other Names**

Caspase-14, CASP-14, 3422-, Caspase-14 subunit p19, Caspase-14 subunit p10, CASP14

#### Target/Specificity

This CASP14 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 59-93 amino acids from human CASP14.

#### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CASP14 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

### CASP14 Antibody (N-Term) - Protein Information

#### Name CASP14

**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).

# **Cellular Location** Cytoplasm. Nucleus

#### **Tissue Location**

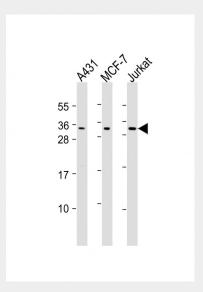
Expressed in keratinocytes of adult skin suprabasal layers (from spinous layers to the stratum granulosum and stratum corneum) (at protein level). Expressed in keratinocytes of hair shaft and sebaceous glands (at protein level). In psoriatic skin only expressed at very low levels (PubMed:11175259). The 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).

## CASP14 Antibody (N-Term) - Protocols

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

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

#### CASP14 Antibody (N-Term) - Images



All lanes: Anti-CASP14 Antibody (N-Term) at 1:2000 dilution Lane 1: A431 whole cell lysates Lane 2: MCF-7 whole cell lysates Lane 3: Jurkat whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



# CASP14 Antibody (N-Term) - Background

Believed to be a non-apoptotic caspase which is involved in epidermal differentiation. Seems to play a role in keratinocyte differentiation and cornification. Probably regulates maturation of the epidermis by proteolytically processing filaggrin (By similarity).

## CASP14 Antibody (N-Term) - References

Eckhart L.,et al.Biochem. Biophys. Res. Commun. 277:655-659(2000). Pistritto G.,et al.Cell Death Differ. 9:995-1006(2002). Rasmussen H.H.,et al.Electrophoresis 13:960-969(1992). Lippens S.,et al.Cell Death Differ. 7:1218-1224(2000). Chien A.J.,et al.Biochem. Biophys. Res. Commun. 296:911-917(2002).