10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CASP14 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21517a

Product Information

Application	WB, E
Primary Accession	P31944
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52885
Calculated MW	27680

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.

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).

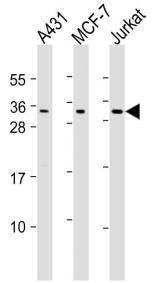
Background

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).

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).

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.