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CASP14 Blocking Peptide (N-Term)

Synthetic peptide
Catalog # BP21517a

Specification

CASP14 Blocking Peptide (N-Term) - Product Information

Primary Accession P31944

CASP14 Blocking Peptide (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
The synthetic peptide sequence is selected from aa 59-73 of HUMAN CASP14

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CASP14 Blocking Peptide (N-Term) - 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"

CASP14 Blocking Peptide (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 Blocking Peptide (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).

target="_blank">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 Blocking Peptide (N-Term) - Protocols

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

- Blocking Peptides