PRODUCT INFORMATION

Caspase-14 (human, recombinant)

Item No. 43693

Overview and Properties

Synonyms:	CASP-14, MICE, Mini-interleukin-1 Converting Enzyme
Source:	Recombinant human N-terminal His-tagged caspase-14 expressed in *E. coli*
Amino Acids:	2-242 (full length)
Uniprot No.:	P31944
Molecular Weight:	28.5 kDa
Storage:	-80°C (as supplied)
Stability:	≥1 year
Purity:	≥98% estimated by SDS-PAGE
Supplied in:	Lyophilized from sterile PBS, pH 7.4.
Protein Concentration:	***batch specific*** mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Caspase-14 is a cysteinyl aspartic protease.[1-3] It is expressed during embryonic development and in differentiating keratinocytes and localizes to the cytoplasm and nucleus.[2,3] Caspase-14 is produced as a zymogen containing a large and small subunit and is activated *via* proteolytic cleavage by kallikrein 7 (KLK7).[4] It is involved in keratinocyte differentiation, cornification, UVB protection, and profilaggrin degradation.[1] A SNP in *CASP14*, the gene encoding caspase-14, is associated with ichthyosis.[5] Cayman's Caspase-14 (human, recombinant) protein consists of 248 amino acids and has a calculated molecular weight of 28.5 kDa. By SDS-PAGE, under reducing conditions, the apparent molecular mass of the protein is 30 kDa.

References

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2. Hu, S., Snipas, S.J., Vincenz, C., *et al.* Caspase-14 is a novel developmentally regulated protease. *J. Biol. Chem.* **273**, 29648-29653 (1998).
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5. Kirchmeier, P., Zimmer, A., Bouadjar, B., *et al.* Whole-exome-sequencing reveals small deletions in CASP14 in patients with autosomal recessive inherited ichthyosis. *Acta Derm. Venereol.* **97(1)**, 102-104 (2017).

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