

Recombinant Human CASP14 (C-6His)

Catalog No: CG19

Description	Recombinant Human Caspase-14 is produced by our E.coli expression system and the target gene encoding Ser2-Gln242 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Caspase-14; CASP-14; CASP14
Accession No.	P31944
Predicted Molecular Weight	28.7kDa
AP Molecular Weight	31kDa, reducing conditions.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Reconstitution	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100µg/ml.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
Quality Control	<p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.</p>
Shipping	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
Storage	<p>Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>
Background	<p>Caspase 14 (CASP14) is an enzyme that belongs to the peptidase C14A family. The Caspase 14 protein is complexed of unprocessed caspase-14 and processed 19 kDa (p19) and 10 kDa (p10) subunits. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes, which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. CASP14 has been shown to be processed and activated by Caspase 8 and Caspase 10 in vitro, and by anti-Fas agonist antibody or TNF- related apoptosis inducing ligand in vivo. The expression and processing of this caspase may be involved in keratinocyte terminal differentiation, which is important for the formation of the skin barrier. It is believed to be a non-apoptotic caspase which is involved in epidermal differentiation, keratinocyte differentiation and cornification. CASP14 probably regulates maturation of the epidermis by proteolytically processing filaggrin.</p>

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