

Product datasheet

Recombinant human Caspase-1 protein (Active)  
ab39901

5 References 1 Image

Description

Product name	Recombinant human Caspase-1 protein (Active)		
Biological activity	Specific Activity: > 5000 units/mg. Unit definition: One unit of the recombinant caspase-1 is the enzyme activity that cleaves 1 nmol of the caspase substrate YVAD-pNA (pNA: pnitroaniline) per hour at 37°C in a reaction solution containing 50 mM Hepes, pH 7.2, 50 mM NaCl, 0.1% Chaps, 10 mM EDTA, 5% Glycerol, and 10 mM DTT.		
Purity	> 80 % SDS-PAGE. Affinity chromatography.		
Expression system	Escherichia coli		
Accession	<u>P29466</u>		
Protein length	Full length protein		
Animal free	No		
Nature	Recombinant		
Species	Human		
Sequence	NPAMPTSSGS EGNVKLCSLE EAQRIWKQKS AEIYPIMDKS SRTRLALIC NEEFDSIPRR TGAEVDITGM TMLLQNLGYS VDVKKNLTA DMTELEAFA HRPEHKTS DS TFLVFMSHGI REGICGKKHS EQVPDILQLN AIFNMLNTKN CPSLKDKPKV IIIQACRGDS PGVVWFKDSV GVSGNLSLPT TEEFEDDAIK KAHIEKDFIA FCSSTPDNVS WRHPTMGSVF IGR LIEHMQE YACSCDVEEI FRKVRFSFEQ PDGRAQMPTT ERVTLTRCFYLFP GH		
Predicted molecular weight	32 kDa		
Molecular weight information	Large subunit 20 kDa and small subunit 10 kDa.		
Amino acids	120 to 404		
Tags	His tag N-Terminus		
Additional sequence information	(Gene ID 834) (NP_150634.1) Full length mature protein, minus propeptide (aa 1-119).		

Specifications

Our **Abpromise guarantee** covers the use of **ab39901** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE
	Functional Studies
<b>Form</b>	Lyophilized
<b>Additional notes</b>	This product is manufactured by BioVision, an Abcam company and was previously called 1081 Active Caspase-1, Human Recombinant. 1081-25 is the same size as the 25 unit size of ab39901.
	Active caspase-1 is useful in studying enzyme regulation, determining target substrates, screening caspase inhibitors, or as a positive control in caspase activity assays.
	The active caspase 1 preferentially cleaves caspase-1 substrates (e.g., YVAD-AFC or YVAD-pNA).

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## Preparation and Storage

<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
	pH: 7.40
	Constituents: 10.269% Trehalose, 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate
	This product is an active protein and may elicit a biological response in vivo, handle with caution.

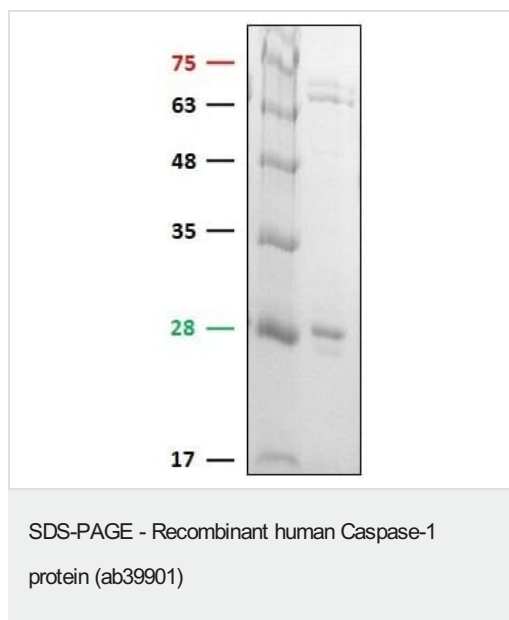
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## General Info

<b>Relevance</b>	Caspases are a family of cysteine proteases that are key mediators of programmed cell death or apoptosis. The precursor form of all caspases is composed of a prodomain, and large and small catalytic subunits. The active forms of caspases are generated by several stimuli including ligand-receptor interactions, growth factor deprivation and inhibitors of cellular functions. All known caspases require cleavage adjacent to aspartates to liberate one large and one small subunit, which associate into a2b2 tetramer to form the active enzyme. Caspase 1 is similar to the cell death gene CED3 of C. elegans and regulates multiple proinflammatory cytokines, including Interleukin 1b and interferon-gamma-inducing factor. Caspase 1 plays a role in down stream of Caspase 8 which is involved in Fas-mediated apoptosis.
<b>Cellular localization</b>	Cytoplasmic

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## Images



ab39901 on SDS-PAGE.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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