

## Product datasheet

# Recombinant mouse Caspase-1 protein ab52079

## 2 References

### Description

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<b>Product name</b>	Recombinant mouse Caspase-1 protein
<b>Biological activity</b>	Specific Activity: >2000 units/mg.  Unit definition: One unit of the recombinant caspase-1 is the enzyme activity that cleaves 1 nmol of the caspase substrate Ac-YVAD-pNA (pNA: p-nitroaniline) 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.
<b>Purity</b>	> 80 % SDS-PAGE. Affinity Chromatography.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P29452</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Mouse
<b>Sequence</b>	NK EDGTFPGLTG TLKFCPLEKA QKLWKENPSE YPIMNTTTR TRLALIICNT EFQHLSPRVG AQVDLREMKL LLEDLGYTVK VKENLTALEM VKEVKEFAAC PEHKTS DSTF LVFMSHGIQE GICGTTYSNE VSDILKVDTI FQMMNTLKCP SLKDKPKVII IQACRGEKQG VLLKDSVRD SEEDFLTDAI FEDDGIKKAH IEKDFIAFCS STPDNVS WRH PVRGSLFIES LIKHMKEYAW SCDLEDIFRK VRFSFEQPEF RLQMPTADRV TLTKRFYLFPGH
<b>Amino acids</b>	119 to 402
<b>Tags</b>	His tag N-Terminus
<b>Additional sequence information</b>	Large (20 kD) and small (10 kD) subunits. The active caspase-1 is a heterotetramer consisting of two large and two small subunits. This protein contains about 284 aa without propeptide.

### Specifications

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Our **Abpromise guarantee** covers the use of **ab52079** 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>	Functional Studies
<b>Form</b>	Lyophilized
<b>Additional notes</b>	This product is manufactured by BioVision, an Abcam company and was previously called 1181 Caspase-1, mouse recombinant. 1181-100 is the same size as the 100 unit size of ab52079.

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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. Constituents: PBS, 15% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution.
<b>Reconstitution</b>	Reconstitute to 1 unit per µl in PBS containing 15% glycerol. Following reconstitution in PBS, the enzyme should be aliquoted and immediately stored at -70°C. Avoid multiple freeze/thaw cycles as activity might decrease.

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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 <i>C. elegans</i> 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

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

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