

**Caspase-1, mouse recombinant protein****Caspase 1****Catalog # PBV10027r****Specification**

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**Caspase-1, mouse recombinant protein - Product info**

Primary Accession

[P29452](#)

Calculated MW

**large (20 kD) and small (10 kD) subunits.  
kDa****Caspase-1, mouse recombinant protein - Additional Info**

Gene ID

**12362**

Gene Symbol

**CASP1****Other Names**

Caspase-1, Short name=CASP-1, Interleukin-1 beta convertase, Short name=IL-1BC, Interleukin-1 beta-converting enzyme, Short name=ICE, IL-1 beta-converting enzyme, p45

Gene Source

**Mouse**

Source

**E. coli**

Assay&amp;Purity

**SDS-PAGE;**

Assay2&amp;Purity2

**HPLC;**

Recombinant

**Yes****Target/Specificity**

Caspase-1

**Application Notes**

Reconstitute to 1 unit per µl in PBS containing 15% glycerol.

**Format**

Semi-Dry

**Storage**

The lyophilized caspase-1 is stable for 1 year at -70°C. Following reconstitution in PBS, the enzyme should be aliquoted and immediately stored at -70°C. Avoid multiple freeze/thaw cycles as activity might decrease.

**Caspase-1, mouse recombinant protein - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

### **Caspase-1, mouse recombinant protein - Images**

### **Caspase-1, mouse recombinant protein - Background**

Caspase-1 (also known as ICE) is a prototypical member of the caspase-family of cysteine proteases. Caspase-1 exists in cells as an inactive 45 kDa proenzyme. The pro-enzyme is matured by proteolysis to yield large (20 kD) and small (10 kD) subunits. The active caspase-1 is a heterotetramer consisting of two large and two small subunits. To date the regulatory mechanism of caspase-1 activation and the role of caspase-1 in apoptosis are poorly understood. In THP-1 cells, a large proportion of the caspase-1 is present in the inactive proenzyme form.

The recombinant active mouse caspase-1 was expressed in *E. coli*. The active caspase-1 preferentially cleaves caspase-1 substrates (e.g., YVAD-AFC or YVAD-pNA) and is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-YVAD-pNA or Ac-YVAD-AFC.

### **Caspase-1, mouse recombinant protein - References**

Nett-Fiordalisi M.A., et al. *J. Immunol.* 149:3254-3259(1992).  
Molineaux S.M., et al. *Proc. Natl. Acad. Sci. U.S.A.* 90:1809-1813(1993).  
Casano F.J., et al. *Genomics* 20:474-481(1994).  
van de Craen M., et al. *FEBS Lett.* 403:61-69(1997).