

**Caspase-3 Proform, mouse recombinant protein**  
**Caspase 3 Proform**  
**Catalog # PBV10029r****Specification**

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**Caspase-3 Proform, mouse recombinant protein - Product info**

Primary Accession [Q8BNT4](#)  
Calculated MW **32.0 kDa** KDa

**Caspase-3 Proform, mouse recombinant protein - Additional Info**

Gene ID **12367**  
Gene Symbol **CASP3**

**Other Names**

Caspase-3, Short name=CASP-3, Apopain, Cysteine protease CPP32, Short name=CPP-32, FLICE, Protein Yama, SREBP cleavage activity 1, Short name=SCA-1

Gene Source **Mouse**  
Source **E. coli**  
Assay&Purity **SDS-PAGE; ≥90%**  
Assay2&Purity2 **HPLC;**  
Recombinant **Yes**  
**Target/Specificity**  
Caspase-3

**Application Notes**

Reconstitute to 0.1 µg/ µl in PBS containing 15% glycerol.

**Format**

Lyophilized powder

**Storage**

-70°C; Lyophilized powder

**Caspase-3 Proform, 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-3 Proform, mouse recombinant protein - Images**

### **Caspase-3 Proform, mouse recombinant protein - Background**

Caspase-3 (also known as CPP32, Yama and apopain) is a member of the caspase family of cysteine proteases. Caspase-3 exists in cells as an inactive 32 kDa proenzyme. Proteolytic processing of this inactive proenzyme generates the 17 kD and 12 kD subunits which, when assembled as a tetramer (a pair of heterodimers), form the active caspase. Cascades of caspase activation have been shown to be key signal-transducing events in apoptosis. Pro-caspase-3, like other procaspases with short N-terminal prodomains, is considered to be a downstream or “effector” enzyme. Pro-caspase-3 can be cleaved and activated by caspase-8 and -10 which are themselves activated through interaction with death ligand receptor/adaptor protein complexes (e.g., Fas/FADD). Pro-caspase-3 is also processed by caspase-9, the apical caspase that is activated by binding to the Apaf-1/cytochrome c/ATP “apoptosome”. Thus, activation of procaspase-3 stands at a point of convergence for the two major types of apoptosis signaling pathways—those linked to cell surface death receptors and those linked to mitochondrial release of cytochrome c.

The recombinant Procaspase-3 (1183P-5) is produced by expression of a human cDNA in *E. coli*. The purified protein is highly activatable by treatment with active recombinant caspase-8 (1088-25, -100). We routinely test the activation using 10-30 ng of the procaspase-3 treated with 0.1-0.5 units of the active recombinant caspase-8 in 100 µl of Reaction Buffer (1068-20) for 30 minutes. Activation of procaspase-3 can be monitored using the Caspase-3 Fluorometric and Colorimetric Assay Kits .