

Caspase-3, rat recombinant protein**Caspase 3****Catalog # PBV10032r****Specification**

Caspase-3, rat recombinant protein - Product info

Calculated MW

**large (17 kD) and small (11 kD) subunits
KDa****Caspase-3, rat recombinant protein - Additional Info****Other Names**

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

Gene Source

Rat

Source

E. coli

Assay&Purity

SDS-PAGE;

Assay2&Purity2

HPLC;

Recombinant

Yes**Target/Specificity**

Caspase-3

Application Notes

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

Format

Lyophilized powder

Storage

-70°C; Lyophilized powder

Caspase-3, rat 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, rat recombinant protein - Images**Caspase-3, rat recombinant protein - Background**

Caspase-3 (also known as CPP32, Yama and apopain) is a major member of the caspase-family of cysteine proteases. Caspase-3 exists in cells as an inactive 32 kDa proenzyme. During apoptosis procaspase-3 is processed at aspartate residues by self-proteolysis and/or cleavage by upstream caspases, such as caspase-6 (Mch2), caspase-8 (Flice) and granzyme B. The processed form of caspase-3 consists of large (17 kD) and small (11 kD) subunits which associate to form the active enzyme. The active caspase-3 has been shown involving in the proteolysis of several important molecules, such as poly (ADP-ribose) polymerase (PARP), the sterol regulatory element binding proteins (SREBPs), focal adhesion kinase (FAK), and others. The recombinant active human caspase-3 expressed in *E. coli* spontaneously undergoes autoprocessing to yield subunits characteristic of the native enzyme. The active caspase-3 preferentially cleaves caspase-3 substrates (e.g., DEVD-AFC or DEVD-pNA) and is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-DEVD-pNA or Ac-DEVD-AFC .