

Caspase-3, human recombinant protein

Caspase-3

Catalog # PBV10012r

Specification

Caspase-3, human recombinant protein - Product info

Primary Accession

[P42574](#)

Calculated MW

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

Gene ID

836

Gene Symbol

CASP3

Other Names

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

Gene Source

Human

Source

E.coli

Assay&Purity

SDS-PAGE;

Assay2&Purity2

HPLC;

Recombinant

Yes

Target/Specificity

Caspase-3

Application Notes

Reconstitute in PBS containing 15% glycerol.

Format

Semi-Dry

Storage

-70°C; Semi-Dry

Caspase-3, human 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, human recombinant protein - Images

Caspase-3, human 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 graysin 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 (Full length gene Accession No. NP_004337). 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

Caspase-3, human recombinant protein - References

- Fernandes-Alnemri T., et al. *J. Biol. Chem.* 269:30761-30764(1994).
- Tewari M., et al. *Cell* 81:801-809(1995).
- Pelletier M., et al. *Biochem. Biophys. Res. Commun.* 316:93-99(2004).
- Ota T., et al. *Nat. Genet.* 36:40-45(2004).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.