

## Active Porcine Calpain 1 recombinant protein

Calpain 1

Catalog # PBV10026r

### Specification

#### Active Porcine Calpain 1 recombinant protein - Product info

Primary Accession [P35750](#)  
Calculated MW **110 kDa** KDa

#### Active Porcine Calpain 1 recombinant protein - Additional Info

Gene ID **397027**  
Gene Symbol **CAPN1**  
**Other Names**  
Calpain-1 catalytic subunit, Calcium-activated neutral proteinase 1, CANP 1, Calpain mu-type, Calpain-1 large subunit, Micromolar-calpain

Gene Source **Porcine**  
Source **Porcine Erythrocytes**  
Assay&Purity **SDS-PAGE; ≥85%**  
Assay2&Purity2 **HPLC;**  
Recombinant **No**  
Results **≥ 1000 units/mg**

**Target/Specificity**  
Calpain 1

**Format**  
Liquid

**Storage**  
-70°C; In 20 mM imidazole-HCl, 5 mM β-mercaptoethanol, 1 mM EDTA, 1 mM EGTA, 30% glycerol, pH 6.8.

#### Active Porcine Calpain 1 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](#)

#### Active Porcine Calpain 1 recombinant protein - Background

The activity of Calpain activity is attributed to two main isoforms: n-calpain and m-calpain, which are ubiquitously, expressed proteases implicated in cellular migration, cell cycle progression, degenerative processes and cell death. These heterodimeric enzymes are composed of distinct catalytic subunits, encoded by Capn1 (n-calpain) or Capn2 (m-calpain), and a common regulatory subunit encoded by Capn4. CAPN1 is a calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of the substrates involved in cytoskeletal remodeling and signal transduction. CAPN1 is activated by micromolar concentrations of calcium and inhibited by calpastatin.

#### Active Porcine Calpain 1 recombinant protein - References

Smith T.P.L.,et al.J. Anim. Sci. 79:552-553(2001).  
Winteroe A.K.,et al.Mamm. Genome 7:509-517(1996).  
Sun W.,et al.Biochimie 75:931-936(1993).