



# Calpain 1 (PT1874R) mouse mAb

<b>Catalog No</b>	YP-mAb-19437
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB
<b>Gene Name</b>	CAPN1 CANPL1 PIG30
<b>Immunogen</b>	The specific immunogen used to produce this antibody is proprietary information.
<b>Specificity</b>	Endogenous
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal,Mouse,IgG
<b>Purification</b>	Recombinant Antibody expressed in animal component-free (ACF) media, purified via Protein A affinity chromatography.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Synonyms</b>	CAPN1 CANPL1 PIG30;Calpain-1 catalytic subunit (Calcium-activated neutral proteinase 1) (CANP 1) (Calpain mu-type) (Calpain-1 large subunit) (Cell proliferation-inducing gene 30 protein) (Micromolar-calpain) (muCANP)
<b>Observed Band</b>	75kD
<b>Calculated Molecular Weight</b>	82kD
<b>Cell Pathway</b>	Cytoplasm . Cell membrane . Translocates to the plasma membrane upon Ca (2+) binding. In granular keratinocytes and in lower corneocytes , colocalizes with FLG and FLG2 (PubMed:21531719) . .
<b>Tissue Specificity</b>	Ubiquitous.
<b>Function</b>	Catalytic activity:Broad endopeptidase specificity. ,cofactor:Binds 3 calcium ions. ,enzyme regulation:Activated by micromolar concentrations of calcium and inhibited by calpastatin. ,Function:Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. ,online information:Calpain ,similarity:Belongs to the peptidase C2 family. ,similarity:Contains 1 calpain catalytic domain. ,similarity:Contains 4 EF-hand domains. ,subcellular location:Translocates to the plasma membrane upon Ca (2+) binding. ,subunit:Forms a heterodimer with a small (regulatory) subunit (CAPNS1) . ,tissue specificity:Ubiquitous. ,

**Background**

The calpains , calcium-activated neutral proteases , are nonlysosomal , intracellular cysteine proteases. The mammalian calpains include ubiquitous , stomach-specific , and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large , catalytic subunits associated with a common small , regulatory subunit. This gene encodes the large subunit of the ubiquitous enzyme , calpain 1. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq , Nov 2010] ,

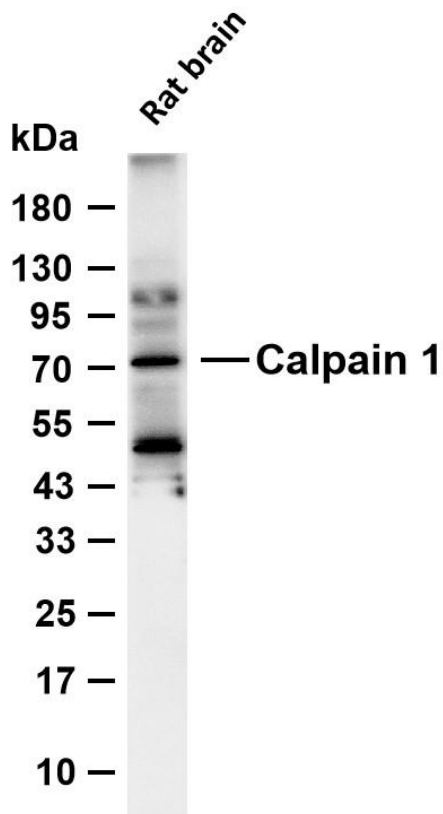
**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Calpain 1 (PT1874R) antibody. The HRP-conjugated Goat anti-mouse IgG (H + L) antibody was used to detect the antibody.

Lane 1: Rat brain

Predicted band size: 82kDa

Observed band size: 75kDa