



Calpain 1 (PT1874R) Rabbit mAb

Catalog No	YP-rAb-18541
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB、IHC、IF、ELISA
Gene Name	CAPN1 CANPL1 PIG30
Immunogen	The specific immunogen used to produce this antibody is proprietary information.
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Purification	Recombinant Antibody expressed in animal component-free (ACF) media, purified via Protein A affinity chromatography.
Dilution	IHC 1:200-1:1000; WB 1:500-1:2000; IF 1:200-1:1000; ELISA 1:5000-1:20000 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0 (Cat#YS0004)
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15°C to -25°C/1 year(Do not lower than -25°C)
Synonyms	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)
Observed Band	75kD
Calculated Molecular Weight	82kD
Cell Pathway	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) . .
Tissue Specificity	Ubiquitous.
Function	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],

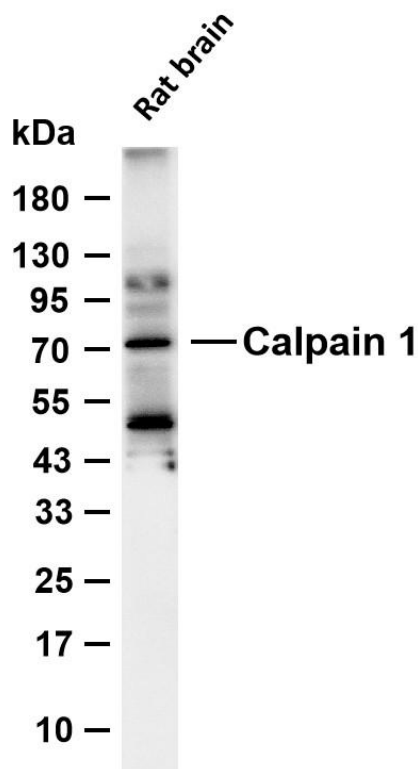
matters needing attention

Avoid repeated freezing and thawing!

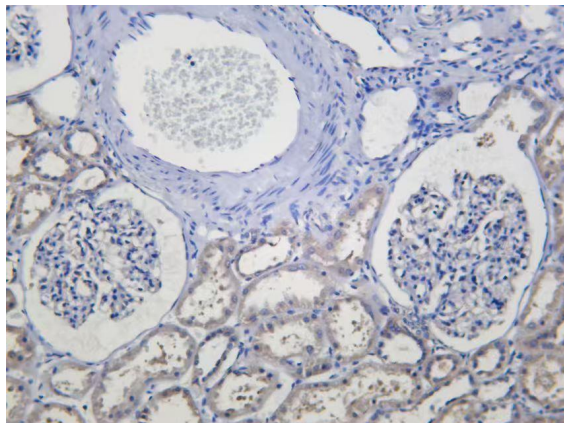
Usage suggestions

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-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Rat brain
Predicted band size: 82kDa Observed band size: 75kDa



Human kidney was stained with anti-Calpain 1 (PT1874R) Rabbit antibody