SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-CAPN1 antibody

Catalog Number: SL23048R

FOR RESEARCH USE ONLY

[DATASHEET]

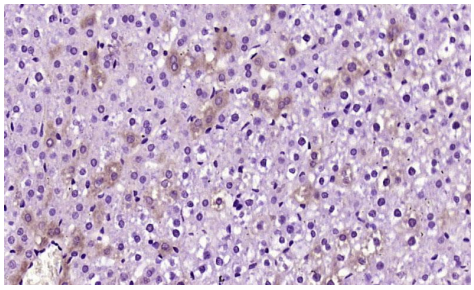
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	CAPN1
Immunogen:	KLH conjugated synthetic peptide derived from mouse Calpain 1: 521-620/713
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Rat(predicted:Human,Mouse)
Predicted MW.:	78kDa
Subcellular Location:	cytoplasmic The cell membrane
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] **Function:** Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. **Subunit:** Forms a heterodimer with a small (regulatory) subunit (CAPNS1).

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	Subcellular Location: Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding. **Tissue Specificity:** Ubiquitous. **Post-translational modifications:** Undergoes calcium-induced successive autoproteolytic cleavages that generate a membrane-bound 78 kDa active form and an intracellular 75 kDa active form. Calpastatin reduces with high efficiency the transition from 78 kDa to 75 kDa calpain forms. **Similarity:** Belongs to the peptidase C2 family. Contains 1 calpain catalytic domain. Contains 4 EF-hand domains. **Database links:** **Entrez Gene:** 12333 Mouse **Entrez Gene:** 823 Human **Entrez Gene:** 29153 Rat Omim: 114220 Human **SwissProt:** P07384 Human **SwissProt:** O35350 Mouse **SwissProt:** P97571 Rat **Unigene:** 502842 Human **Unigene:** 6221 Mouse **Unigene:** 6037 Rat Calpain is a family of calcium-dependent cysteine proteases widely present in various organ tissues throughout the body. Calpain participates in different cellular processes, including Cytoskeleton and The cell membrane attachment configuration remodeling, various Signal transduction pathways, and Apoptosis.

[VALIDATION IMAGES]



Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CAN1) Polyclonal Antibody, Unconjugated (SL23048R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.