

# Calpain small subunit 1 Rabbit pAb

Catalog No.: A6539 **2 Publications**

## Basic Information

**Observed MW**

28kDa

**Calculated MW**

28kDa

**Category**

Primary antibody

**Applications**

WB, IHC-P, ELISA

**Cross-Reactivity**

Human, Mouse, Rat

## Background

This gene is a member of the calpain small subunit family. Calpains are calcium-dependent cysteine proteinases that are widely distributed in mammalian cells. Calpains operate as heterodimers, comprising a specific large catalytic subunit (calpain 1 subunit in Calpain I, and calpain 2 subunit in Calpain II), and a common small regulatory subunit encoded by this gene. This encoded protein is essential for the stability and function of both calpain heterodimers, whose proteolytic activities influence various cellular functions including apoptosis, proliferation, migration, adhesion, and autophagy. Calpains have been implicated in neurodegenerative processes, such as myotonic dystrophy. A pseudogene of this gene has been defined on chromosome 1. Alternative splicing results in multiple transcript variants.

## Recommended Dilutions

**WB** 1:500 - 1:2000**IHC-P** 1:50 - 1:100

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

**Gene ID**

826

**Swiss Prot**

P04632

**Immunogen**

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

**Synonyms**

CANP; CDPS; CSS1; CANPS; CAPN4; CALPAIN4; Calpain small subunit 1

## Contact

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## Product Information

**Source**

Rabbit

**Isotype**

IgG

**Purification**

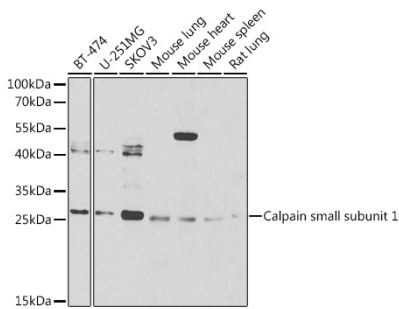
Affinity purification

**Storage**

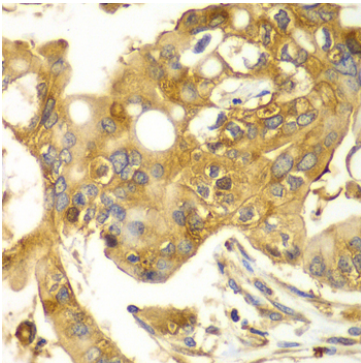
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.

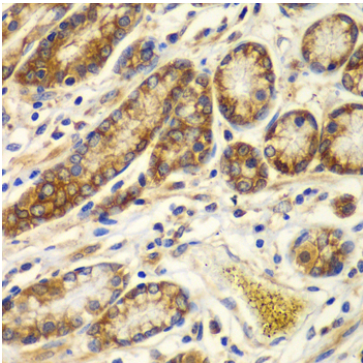
Validation Data



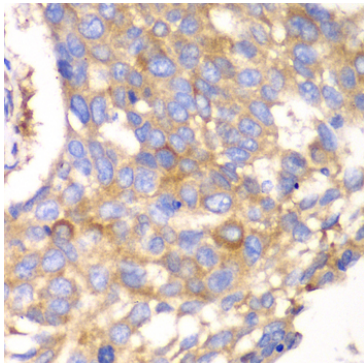
Western blot analysis of various lysates using Calpain small subunit 1 Rabbit pAb (A6539) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 90s.



Immunohistochemistry analysis of paraffin-embedded Human liver cancer using Calpain small subunit 1 Rabbit pAb (A6539) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human colon using Calpain small subunit 1 Rabbit pAb (A6539) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human esophageal cancer using Calpain small subunit 1 Rabbit pAb (A6539) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.