

## **Anti-Calpain 2 Picoband Antibody**

**Catalog # ABO13013** 

# **Specification**

## **Anti-Calpain 2 Picoband Antibody - Product Information**

Application WB, IHC-P
Primary Accession P17655
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Calpain-2 catalytic subunit(CAPN2) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# **Anti-Calpain 2 Picoband Antibody - Additional Information**

### Gene ID 824

#### **Other Names**

Calpain-2 catalytic subunit, 3.4.22.53, Calcium-activated neutral proteinase 2, CANP 2, Calpain M-type, Calpain large polypeptide L2, Calpain-2 large subunit, Millimolar-calpain, M-calpain, CAPN2. CANPL2

# Calculated MW 79995 MW KDa

# **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Rat, By Heat<br/>Vestern blot, 0.1-0.5  $\mu$ g/ml, Human, Mouse, Rat, <br/> <br/> <br/> tr>

# **Subcellular Localization**

Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding.

# **Tissue Specificity**

Ubiquitous.

## **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

### **Immunogen**

E. coli-derived human Calpain 2 recombinant protein (Position: R500-L700). Human Calpain 2 shares 93.5% and 92.5% amino acid (aa) sequence identity with mouse and rat Calpain 2, respectively.

## **Purification**



Immunogen affinity purified.

## **Cross Reactivity**

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# **Anti-Calpain 2 Picoband Antibody - Protein Information**

Name CAPN2

**Synonyms** CANPL2

### **Function**

Calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. Proteolytically cleaves MYOC at 'Arg-226' (PubMed:<a href="http://www.uniprot.org/citations/17650508" target="\_blank">17650508</a>). Proteolytically cleaves CPEB3 following neuronal stimulation which abolishes CPEB3 translational repressor activity, leading to translation of CPEB3 target mRNAs (By similarity).

### **Cellular Location**

Cytoplasm. Cell membrane. Note=Translocates to the plasma membrane upon Ca(2+) binding

Tissue Location Ubiquitous.

## **Anti-Calpain 2 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Anti-Calpain 2 Picoband Antibody - Images



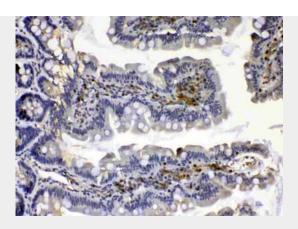
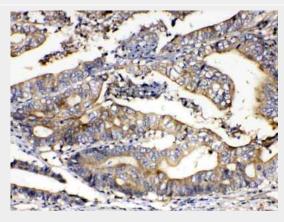
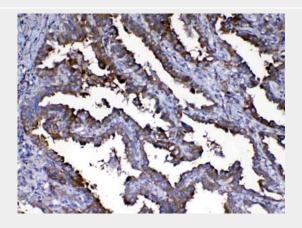
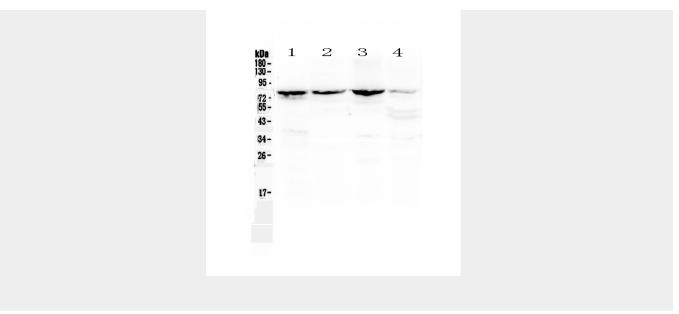


Figure 4. IHC analysis of Calpain 2 using anti-Calpain 2 antibody (ABO13013).









**Anti-Calpain 2 Picoband Antibody - Background** 

Calpain-2 catalytic subunit is a protein that in humans is encoded by the CAPN2 gene. 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 2. Multiple heterogeneous transcriptional start sites in the 5' UTR have been reported.