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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**
Format	**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 µg/ml, Human, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat,

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:17650508). 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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Calpain 2 Picoband Antibody - Images

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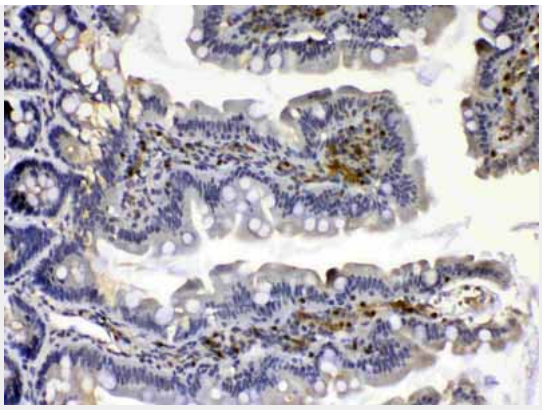
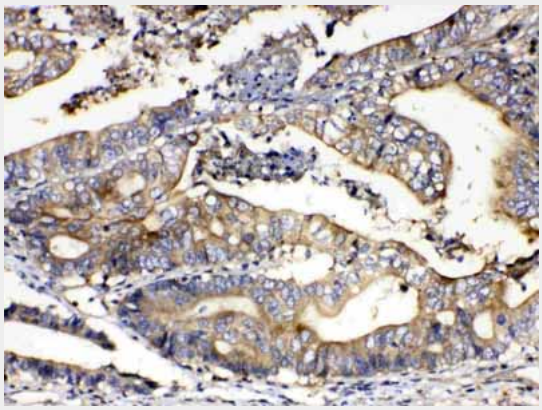
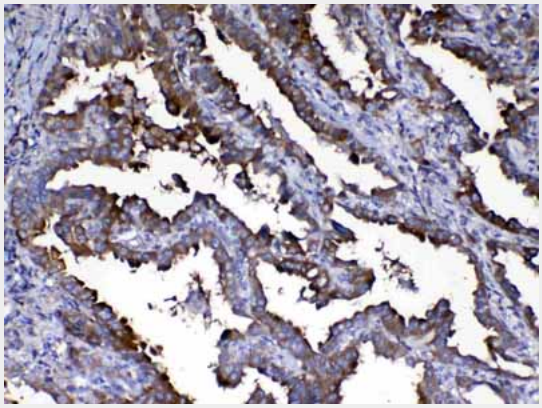


Figure 4. IHC analysis of Calpain 2 using anti-Calpain 2 antibody (ABO13013).





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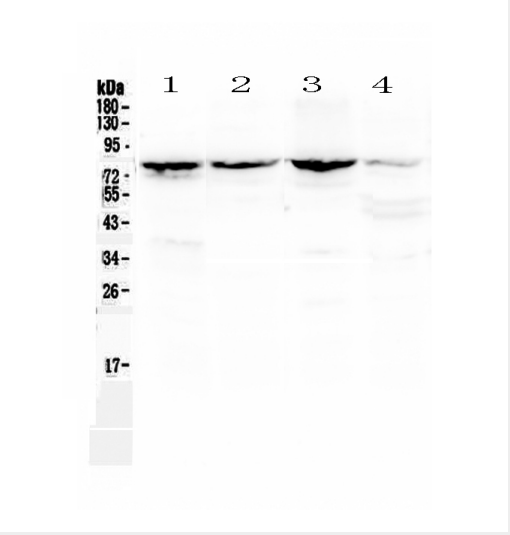

Anti-Calpain 2 Picoband Antibody - Background

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.