

**Anti-Calmodulin Antibody**  
**Catalog # ABO10838****Specification**

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**Anti-Calmodulin Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P62158</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Calmodulin(CALM1&CALM2&CALM3) 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-Calmodulin Antibody - Additional Information****Other Names**

Calmodulin, CaM, CALM1, CALM, CAM, CAM1

**Calculated MW**

16838 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cytoplasm, cytoskeleton, spindle . Cytoplasm, cytoskeleton, spindle pole . Distributed throughout the cell during interphase, but during mitosis becomes dramatically localized to the spindle poles and the spindle microtubules.

**Protein Name**

Calmodulin(CaM)

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Calmodulin(119-136aa DEEVDEMIREADIDGDGQ), identical to the related rat and mouse sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, 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.**

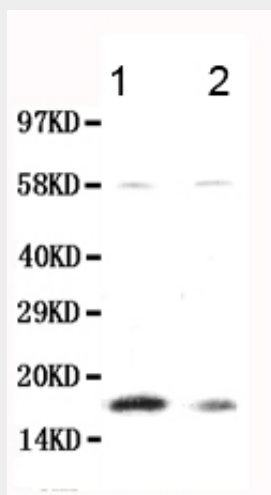
**Sequence Similarities**

Belongs to the calmodulin family.

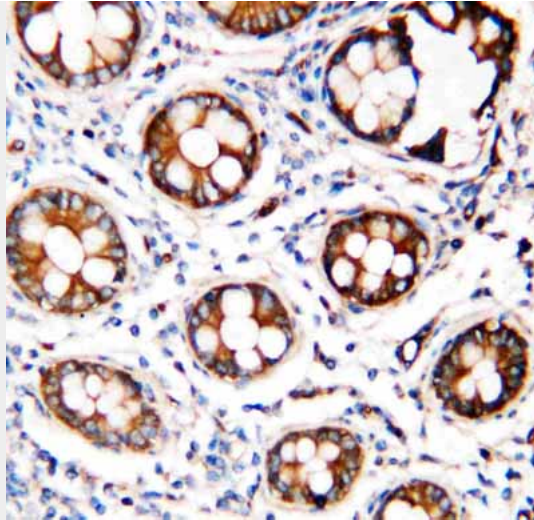
**Anti-Calmodulin Antibody - Protein Information****Anti-Calmodulin Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Calmodulin Antibody - Images**

Anti-Calmodulin antibody, ABO10838, Western blotting  
Lane 1: A549 Cell Lysate  
Lane 2: HT1080 Cell Lysate



Anti-Calmodulin antibody, ABO10838, IHC(P)IHC(P): Human Rectal Cancer Tissue

### **Anti-Calmodulin Antibody - Background**

Calmodulin, calcium-modulated protein, is a calcium-binding protein expressed in all eukaryotic cells. It can bind to and regulate a number of different protein targets, thereby affecting many different cellular functions. Calmodulin mediates processes such as inflammation, metabolism, apoptosis, smooth muscle contraction, intracellular movement, short-term and long-term memory, nerve growth and the immune response. Calmodulin is expressed in many cell types and can have different subcellular locations, including the cytoplasm, within organelles, or associated with the plasma or organelle membranes. Many of the proteins that Calmodulin binds are unable to bind calcium themselves, and as such use Calmodulin as a calcium sensor and signal transducer. Calmodulin can also make use of the calcium stores in the endoplasmic reticulum, and the sarcoplasmic reticulum. Calmodulin undergoes a conformational change upon binding to calcium, which enables it to bind to specific proteins for a specific response. Calmodulin can bind up to four calcium ions, and can undergo post-translational modifications, such as phosphorylation, acetylation, methylation and proteolytic cleavage, each of which has potential to modulate its actions. Calmodulin can also bind to edema factor toxin from the anthrax bacteria. Calmodulin is the archetype of the family of calcium-modulated proteins of which nearly 20 members have been found. Calmodulin contains 149 amino acids and has 4 calcium-binding domains. Its functions include roles in growth and the cell cycle as well as in signal transduction and the synthesis and release of neurotransmitters. Three calmodulin genes (CALM1, CALM2, and CALM3) map to chromosomes 14q24-q31, 2p21.1-p21.3, and 19q13.2-q13.3, respectively.