10320 Camino Santa Fe, Suite G
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Anti-Calmodulin Antibody
Catalog # ABO10838

Specification

Anti-Calmodulin Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P62158
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
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

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.

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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.

Sequence Similarities
Belongs to the calmodulin family.

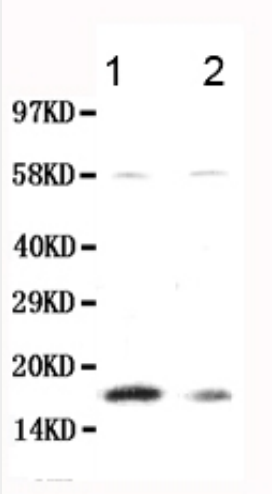
Anti-Calmodulin Antibody - Protein Information

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 Cytomety
- Cell Culture

Anti-Calmodulin Antibody - Images



Anti-Calmodulin antibody, ABO10838, Western blottingLane 1: A549 Cell LysateLane 2: HT1080 Cell Lysate

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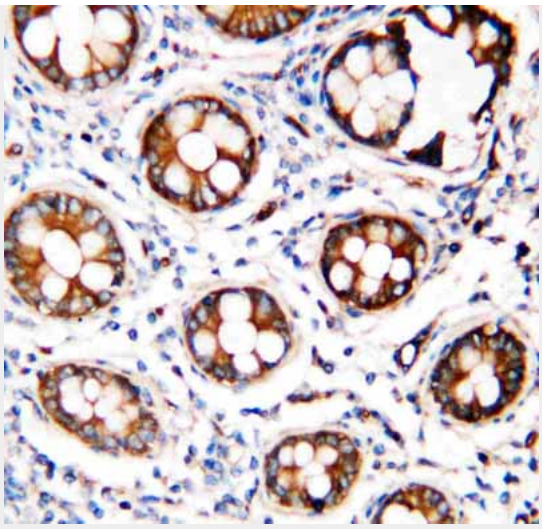

Anti-Calmodulin antibody, ABO10838, IHC(P)IHC(P): Human Rectal Cancer Tissue

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.