

# **Anti-Gelsolin Antibody**

**Catalog # ABO11415** 

## **Specification**

## **Anti-Gelsolin Antibody - Product Information**

Application WB, IHC-P, ICC

Primary Accession P06396
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Gelsolin(GSN) detection. Tested with WB, IHC-P, ICC in Human; Mouse; Rat.

Reconstitution

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

# **Anti-Gelsolin Antibody - Additional Information**

**Gene ID 2934** 

**Other Names** 

Gelsolin, AGEL, Actin-depolymerizing factor, ADF, Brevin, GSN

Calculated MW 85698 MW KDa

**Application Details** 

Immunocytochemistry , 0.5-1 μg/ml, Mouse, Human,

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

**Subcellular Localization** 

Isoform 2: Cytoplasm, cytoskeleton.

**Tissue Specificity** 

Phagocytic cells, platelets, fibroblasts, nonmuscle cells, smooth and skeletal muscle cells.

**Protein Name** 

Gelsolin

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 Gelsolin(763-775aa WDDDYWSVDPLDR), identical to the related rat sequence, and different from the related mouse sequence by one amino acid.



**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.

**Sequence Similarities** 

Belongs to the villin/gelsolin family.

## **Anti-Gelsolin Antibody - Protein Information**

Name GSN

#### **Function**

Calcium-regulated, actin-modulating protein that binds to the plus (or barbed) ends of actin monomers or filaments, preventing monomer exchange (end-blocking or capping). It can promote the assembly of monomers into filaments (nucleation) as well as sever filaments already formed (PubMed:<a href="http://www.uniprot.org/citations/19666512" target="\_blank">19666512</a>). Plays a role in ciliogenesis (PubMed:<a href="http://www.uniprot.org/citations/20393563" target="\_blank">20393563</a>).

**Cellular Location** 

[Isoform 2]: Cytoplasm, cytoskeleton.

### **Tissue Location**

Phagocytic cells, platelets, fibroblasts, nonmuscle cells, smooth and skeletal muscle cells

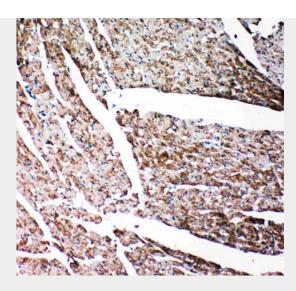
### **Anti-Gelsolin Antibody - Protocols**

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-Gelsolin Antibody - Images**

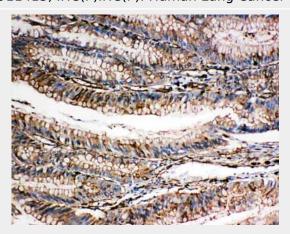




Anti-Gelsolin antibody, ABO11415, IHC(P)IHC(P): Rat Cardiac Muscle Tissue

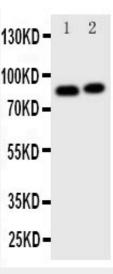


Anti-Gelsolin antibody, ABO11415, IHC(P)IHC(P): Human Lung Cancer Tissue

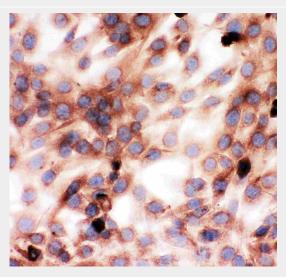


Anti-Gelsolin antibody, ABO11415, IHC(P)IHC(P): Human Intestinal Cancer Tissue





Anti-Gelsolin antibody, ABO11415, Western blottingAll lanes: Anti Gelsolin (ABO11415) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: A431 Whole Cell Lysate at 40ugPredicted bind size: 86KDObserved bind size: 86KD



Anti-Gelsolin antibody, ABO11415, ICCICC: NIH3T3 Cell

### **Anti-Gelsolin Antibody - Background**

Gelsolin also known as GNS is an actin-binding protein that is a key regulator of actin filament assembly and disassembly. Gelsolin is one of the most potent members of the actin-severing gelsolin/villin superfamily. The gene was assigned to human chromosome 9q33.2. Gelsolin is also known as brevin, or actin-depolymerizing factor; it is the principal intracellular and extracellular actin-severing protein. Gelsolin and Gc protein together constitute the extracellular actin-scavenger system which prevents the toxic effects of actin release into the extracellular space under circumstances of cell necrosis. Gelsolin may have therapeutic potential as a mucolytic agent in CF patients. The antiapoptotic activity of gelsolin seems to prevent a step leading to cytochrome c release from the mitochondria into the cytosol.