

Anti-Gelsolin Antibody

Catalog # ABO11415

### Specification

## Anti-Gelsolin Antibody - Product Information

ApplicationWB, IHC-P, ICCPrimary AccessionP06396HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Gelsolin(GSN) detection. Tested with WB, IHC-P, ICC inHuman;Mouse;Rat.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>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 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.

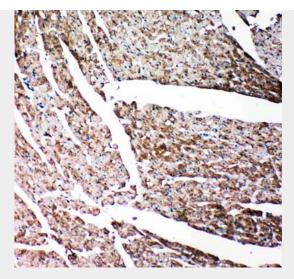
**Tissue Location** Phagocytic cells, platelets, fibroblasts, nonmuscle cells, smooth and skeletal muscle cells

### Anti-Gelsolin Antibody - Protocols

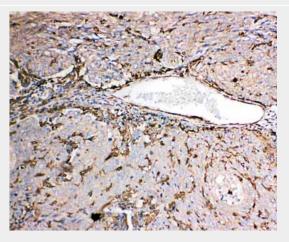
Provided below are standard protocols that you may find useful for product applications.

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

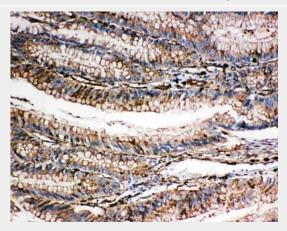
Anti-Gelsolin Antibody - Images



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



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

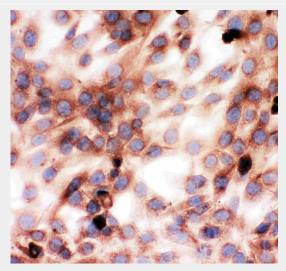


Anti-Gelsolin antibody, ABO11415, IHC(P)IHC(P): Human Intestinal Cancer Tissue





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.