

## Anti-Gelsolin/GSN Antibody Picoband®

Catalog Number: PB9209

### About GSN

Gelsolin, also known as GNS or brevin, 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. 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.

### Overview

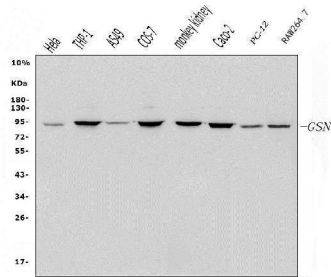
Product Name	Anti-Gelsolin/GSN Antibody Picoband®
Reactive Species	Human, Monkey, Mouse, Rat
Description	Boster Bio Anti-Gelsolin/GSN Antibody Picoband® catalog # PB9209. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P06396

### Technical Details

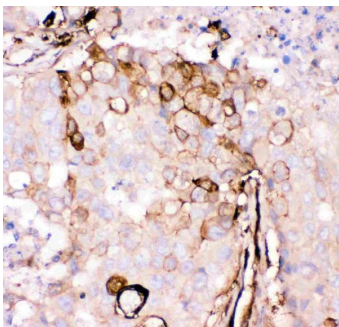
Immunogen	E.coli-derived human Gelsolin recombinant protein (Position: E580-A782). Human Gelsolin shares 94% and 95% amino acid (aa) sequences identity with mouse and rat Gelsolin, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat, Monkey Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells, Human

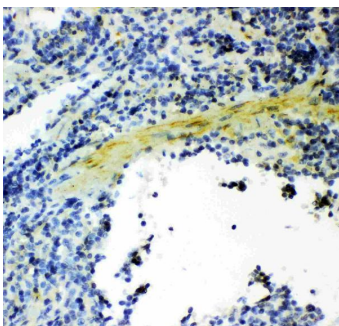
## Anti-Gelsolin/GSN Antibody Picoband® (PB9209) Images



Western blot analysis of Gelsolin using anti-Gelsolin antibody (PB9209). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human THP-1 whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: monkey COS-7 whole cell lysates, Lane 5: monkey kidney tissue lysates, Lane 6: human CACO-2 whole cell lysates, Lane 7: rat PC-12 whole cell lysates, Lane 8: mouse RAW264.7 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Gelsolin antigen affinity purified polyclonal antibody (Catalog # PB9209) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Gelsolin at approximately 86 kDa. The expected band size for Gelsolin is at 86 kDa.

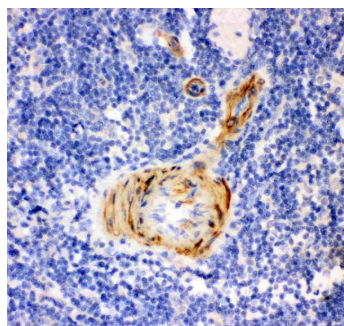


IHC analysis of Gelsolin using anti-Gelsolin antibody (PB9209). Gelsolin was detected in a paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Gelsolin Antibody (PB9209) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of Gelsolin using anti-Gelsolin antibody (PB9209). Gelsolin was detected in a paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Gelsolin Antibody (PB9209) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

IHC analysis of Gelsolin using anti-Gelsolin antibody (PB9209). Gelsolin was detected in a paraffin-embedded



section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Gelsolin Antibody (PB9209) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

### 3 Publications Citing This Product

1. PubMed ID: 10.1002/2211-5463.12997, Cystatin C regulates the cytotoxicity of infection-induced endothelial-derived beta-amyloid
2. PubMed ID: 33030263, Balczon R, Morrow KA, Leavesley S, Francis CM, Stevens TC, Agwaramgbo E, Williams C, Stevens RP, Langham G, Voth S, Cioffi EA, Weintraub SE, Stevens T. Cystatin C regulates the cytotoxicity of infection-induced endothelial-derived beta-amyloid. FEBS Open Bio
3. PubMed ID: 28656274, Guo, Y., Cui, L., Jiang, S., Zhang, A., & Jiang, S. (2017). Proteomics of acute heart failure in a rat post-myocardial infarction model. Molecular Medicine Reports, 16(2), 1946-1956. Advance online publication. doi: 10.3892/mmr.2017.6820

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