

Basic Information

Product Name	Anti-Gelsolin/GSN Antibody	
Gene Name	GSN	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat, monkey	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Gelsolin, identical to the related rat sequence, and different from the related mouse sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	86 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

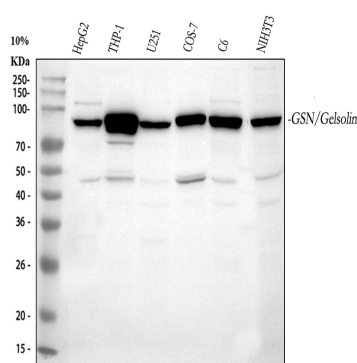
12 months from date of receipt, -20°C as supplied.

Background Information

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.

Selected Validation Data



Western blot analysis of Gelsolin/GSN using anti-Gelsolin/GSN antibody (BA0891). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human THP-1 whole cell lysates,

Lane 3: human U251 whole cell lysates,

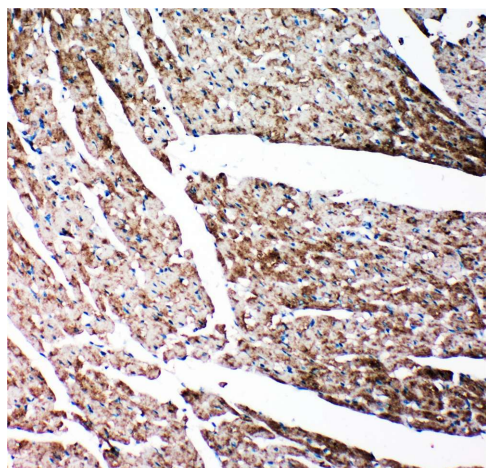
Lane 4: monkey COS-7 whole cell lysates,

Lane 5: rat C6 whole cell lysates,

Lane 6: mouse NIH/3T3 whole cell lysates.

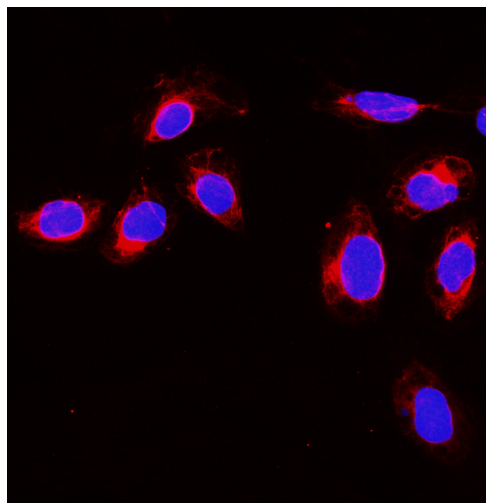
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Gelsolin/GSN antigen affinity purified polyclonal antibody (BA0891) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Gelsolin/GSN at approximately 86 kDa. The expected band size for Gelsolin/GSN is at 86 kDa.



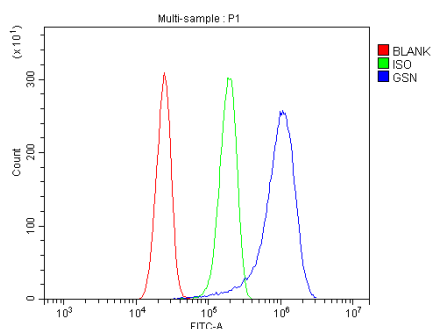
IHC analysis of Gelsolin/GSN using anti-Gelsolin/GSN antibody (BA0891).

Gelsolin/GSN was detected in a paraffin-embedded section of Rat Cardiac Muscle tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Gelsolin/GSN Antibody (BA0891) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of Gelsolin/GSN using anti-Gelsolin/GSN antibody (BA0891).

Gelsolin/GSN was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-Gelsolin/GSN Antibody (BA0891) at a dilution of 1:100. Fluoro594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U87 cells using anti-Gelsolin/GSN antibody (BA0891).

Overlay histogram showing U87 cells stained with BA0891 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Gelsolin/GSN Antibody (BA0891) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.