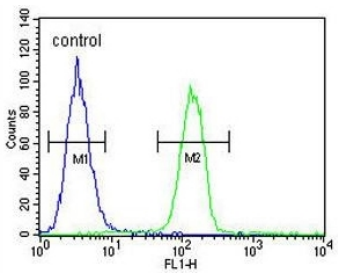
# GSN Antibody / Actin Cytoskeleton Regulator (F54920)

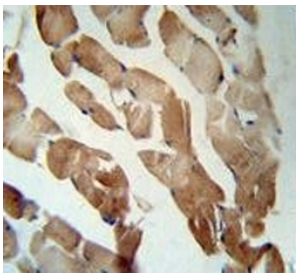
| Catalog No. | Formulation | Size |
|---|---|---|
| F54920-0.4ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml |
| F54920-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

**Bulk quote request**

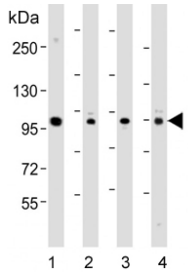
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Purified |
| **UniProt** | P06396 |
| **Localization** | Cytoplasmic, secreted |
| **Applications** | Western blot: 1:1000-1:2000<br>Flow cytometry: 1:10-1:50 (1x10e6 cells)<br>Immunohistochemistry (FFPE): 1:50-1:100 |
| **Limitations** | This GSN Antibody / Actin Cytoskeleton Regulator is available for research use only. |



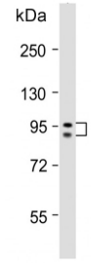

GSN Antibody in Human A375 Melanoma Cells FACS. Flow cytometry testing of GSN Antibody / Actin Cytoskeleton Regulator in human A375 melanoma cells. The overlay histogram compares cells stained with GSN Antibody (green) with the isotype control (blue). This GSN Antibody demonstrates detection of gelsolin in human A375 cells.



GSN Antibody in Human Skeletal Muscle IHC. Immunohistochemistry testing of GSN Antibody / Actin Cytoskeleton Regulator in FFPE human skeletal muscle tissue. Heat-induced epitope retrieval was performed by steaming tissue sections in pH 6 citrate buffer for 20 min followed by cooling prior to staining. This GSN Antibody demonstrates detection of gelsolin in human skeletal muscle tissue.




GSN Antibody in Human, Mouse and Rat Samples WB. Western blot testing of GSN Antibody / Actin Cytoskeleton Regulator in human plasma, human HeLa cell lysate, mouse spleen and rat kidney lysate. Bands are detected within the expected molecular weight range of approximately 81-86 kDa for gelsolin, which has multiple isoforms. This GSN Antibody demonstrates detection of gelsolin across human, mouse and rat samples.




GSN Antibody in Human MCF7 Breast Cancer Cells WB. Western blot testing of GSN Antibody / Actin Cytoskeleton Regulator in human MCF7 breast cancer cell lysate. A prominent band is detected within the expected molecular weight range of approximately 81-86 kDa for gelsolin. This GSN Antibody demonstrates detection of GSN in human breast cancer cells.

## Description

GSN Antibody / Actin Cytoskeleton Regulator recognizes gelsolin, a calcium-regulated actin-binding protein that plays a major role in controlling actin filament organization. GSN belongs to the gelsolin/villin family of cytoskeletal regulatory proteins and can sever existing actin filaments, cap their rapidly growing ends and participate in actin nucleation. Through these activities, gelsolin helps regulate the rapid reorganization of the actin cytoskeleton required for changes in cell shape, adhesion, migration and motility.

Gelsolin activity is strongly influenced by calcium and phosphoinositide signaling, allowing changes in intracellular signaling to be translated into remodeling of the actin network. The protein exists as both cytoplasmic and secreted forms. Cytoplasmic gelsolin directly regulates intracellular actin dynamics, whereas plasma gelsolin participates in the extracellular actin-scavenging system, binding actin released during cell and tissue injury. These functions have made GSN an important research target in studies of cytoskeletal organization, tissue damage and cellular stress responses.

Altered gelsolin expression and activity have also been investigated in cancer, where changes in actin remodeling can affect tumor cell migration, invasion and survival. GSN additionally has connections to apoptosis and other signaling processes that influence cellular behavior. Pathogenic variants in the GSN gene cause gelsolin amyloidosis, also known as familial amyloidosis of the Finnish type, further broadening interest in the protein beyond its fundamental cytoskeletal functions.

This rabbit polyclonal antibody was generated against amino acids 230-259 of human gelsolin. NSJ Bioreagents provides this GSN Antibody for research into gelsolin biology, actin organization and cellular regulation. An Actin Cytoskeleton Regulator antibody targeting GSN can support investigation of the molecular mechanisms controlling actin filament dynamics and cytoskeletal remodeling.

For additional reagents and information on GSN-mediated actin remodeling, visit our Gelsolin Antibody / Actin Severing Protein Antibody page.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the GSN Antibody / Actin Cytoskeleton Regulator may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 230-259 from the human protein was used as the immunogen for the GSN antibody.

## Storage

Aliquot the GSN antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

## Alternate Names

GSN antibody, gelsolin antibody, actin-depolymerizing factor antibody, brevin antibody


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