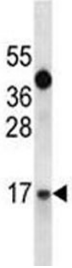
IGF1 Antibody / Somatomedin C Antibody (F40099)

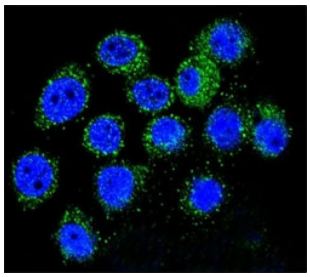
Catalog No.	Formulation	Size
F40099-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40099-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

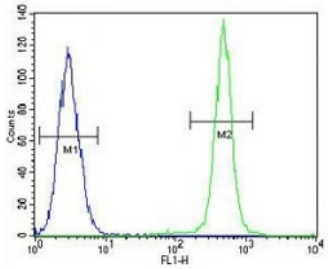
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P05019-2
Applications	Western blot: 1:1000 Immunofluorescence: 1:10-1:50 Flow Cytometry: 1:10-1:50 IHC (Paraffin): 1:10-1:50
Limitations	This IGF1 Antibody / Somatomedin C Antibody is available for research use only.



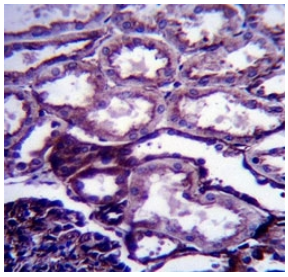
IGF1 Antibody Detection in A549 Human Lung Cancer Cells WB. Western blot analysis of human A549 lung carcinoma cell lysate using IGF1 Antibody. The image shows a discrete immunoreactive band at approximately 15-17 kDa, consistent with the predicted molecular weight of the IGF1 precursor form indicated for this assay. Minimal additional reactivity is visible on the blot, demonstrating clean detection by this Somatomedin C Antibody under the tested conditions.



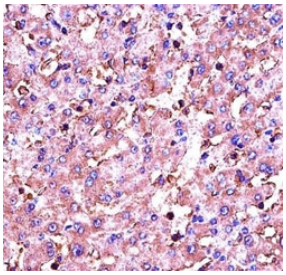
IGF1 Antibody Detection in A549 Human Lung Cancer Cells IF. Immunofluorescence analysis of human A549 lung carcinoma cells using IGF1 Antibody followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green), with DAPI nuclear counterstaining (blue). The image shows green immunoreactivity distributed predominantly throughout the cytoplasm and around the nuclei, while the nuclei remain defined by blue DAPI staining. The observed cellular staining demonstrates detection by this Somatomedin C Antibody under the tested conditions.



IGF1 Antibody Detection in A549 Human Lung Cancer Cells FACS. Flow cytometry analysis of human A549 lung carcinoma cells using IGF1 Antibody followed by FITC-conjugated goat anti-rabbit secondary antibody. The green antibody-stained population shows a pronounced rightward shift in fluorescence intensity relative to the blue negative control, with clear separation between the two distributions. The observed fluorescence shift demonstrates detection by this Somatomedin C Antibody in the tested A549 cells.



IGF1 Antibody Staining of Human Kidney IHC. Immunohistochemistry of FFPE human kidney tissue using IGF1 Antibody. The image shows brown immunoreactivity within renal tubular structures, with staining visible predominantly along the cytoplasm and epithelial borders, while nuclei are comparatively unstained. The observed pattern demonstrates detection by this Somatomedin C Antibody in the tested human kidney section.



IGF1 Antibody Staining of Human Liver IHC. Immunohistochemistry of FFPE human liver tissue using IGF1 Antibody. The image shows widespread granular brown immunoreactivity within hepatocyte cytoplasm, with variation in staining intensity among cells and comparatively unstained nuclei. The observed pattern demonstrates detection by this Somatomedin C Antibody in the tested human liver section.

Description

IGF1 Antibody / Somatomedin C Antibody recognizes insulin-like growth factor 1 (IGF1), a secreted peptide growth factor with structural similarity to insulin. Historically known as Somatomedin C, IGF1 is synthesized as a precursor protein that undergoes proteolytic processing to generate the mature signaling peptide. IGF1 participates in the regulation of somatic growth, cellular proliferation, differentiation, survival, and metabolic homeostasis and serves as an important mediator of growth hormone-dependent physiological effects.

IGF1 exerts many of its biological effects through binding to the insulin-like growth factor 1 receptor (IGF1R), a receptor tyrosine kinase. Ligand-dependent receptor activation stimulates intracellular signaling pathways including PI3K-AKT and RAS-MAPK, influencing cell growth, protein synthesis, glucose and lipid metabolism, and resistance to apoptosis. IGF1 activity is further regulated by a family of insulin-like growth factor binding proteins that control its stability, distribution, and availability to cell-surface receptors.

The IGF1 signaling axis is widely studied in developmental biology, metabolism, aging, and cancer. Altered IGF1 production or signaling can affect normal growth and has been associated with disorders of growth hormone action and IGF1 deficiency. Increased activity of the IGF1-IGF1R pathway has also been investigated in tumor biology because its proliferative and prosurvival signaling can influence malignant cell growth, treatment response, and disease progression.

These diverse functions make Somatomedin C an important target for research into growth-factor signaling and metabolic regulation.

This rabbit polyclonal IGF1 Antibody was generated against a peptide corresponding to a portion of amino acids 115-144 of the human protein. NSJ Bioreagents offers this Somatomedin C Antibody for researchers investigating IGF1 expression and growth-factor biology. An IGF1 Antibody provides a targeted reagent for studying this secreted regulator of cellular growth, survival, development, and metabolism.
Explore our Signal Transduction Antibodies page for additional reagents targeting growth factors, receptors, and intracellular proteins involved in cellular signaling pathways.

Application Notes

Titration of the IGF1 Antibody / Somatomedin C Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 115-144 from the human protein was used as the immunogen for this IGF1 antibody.

Storage

Aliquot the IGF1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IGF1 antibody, Insulin-like growth factor 1 antibody, Insulin-like growth factor I antibody, Somatomedin C antibody, IGF-I antibody

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