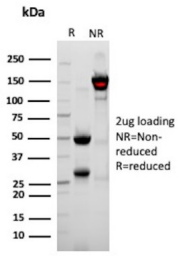
IGF-1 Antibody SPM406 / Insulin Growth Factor Antibody [clone SPM406] (V9027)

Catalog No.	Formulation	Size
V9027-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V9027-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V9027SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM406
Purity	Protein G affinity chromatography
UniProt	P05019
Localization	Cytoplasmic (Secreted)
Applications	Immunohistochemistry (FFPE): 1-2ug/ml (1)
Limitations	This IGF-1 Antibody SPM406 / Insulin Growth Factor Antibody is available for research use only.



Purified IGF-1 Antibody SPM406 Under Reducing and Non-Reducing Conditions. SDS-PAGE analysis of 2 ug of purified IGF-1 Antibody, clone SPM406, under reducing (R) and non-reducing (NR) conditions. The reduced sample shows prominent antibody heavy- and light-chain bands at approximately 50 kDa and 25-30 kDa, respectively. Under non-reducing conditions, the intact antibody migrates predominantly near 150 kDa. The observed banding pattern supports the integrity and purity of the monoclonal Insulin Growth Factor Antibody preparation.

Description

IGF-1 Antibody SPM406 / Insulin Growth Factor Antibody recognizes insulin-like growth factor 1 (IGF1), a secreted polypeptide growth factor structurally related to insulin. Also known as Somatomedin C, IGF1 is an important mediator of growth hormone activity and participates in the regulation of somatic growth, cellular proliferation, differentiation, survival, and metabolism. IGF1 is produced as a precursor protein and subsequently processed to generate the mature growth factor that participates in endocrine, paracrine, and autocrine signaling.

IGF1 exerts many of its biological effects through the insulin-like growth factor 1 receptor (IGF1R), a receptor tyrosine kinase that activates downstream pathways including PI3K-AKT and RAS-MAPK. These signaling networks influence protein synthesis, cell-cycle progression, glucose and lipid metabolism, and resistance to apoptosis. IGF1 activity is further regulated by insulin-like growth factor binding proteins, which influence its stability, distribution, and availability for receptor binding.

The IGF1 signaling axis is widely investigated in developmental biology, metabolism, aging, and cancer. Altered IGF1 production or signaling can influence normal growth and tissue homeostasis, while increased IGF1-IGF1R pathway activity has been studied in relation to tumor progression and resistance to apoptosis. These functions make IGF1 an important target for research into endocrine growth regulation, growth-factor signaling, metabolic control, and mechanisms involved in malignant cell survival.

Clone SPM406 is a mouse monoclonal antibody generated using purified human IGF1 protein as the immunogen. The datasheet reports specificity for IGF1 with minimal cross-reaction with the listed related proteins. NSJ Bioreagents offers this IGF-1 Antibody for researchers investigating IGF1 expression and growth-factor biology. An IGF-1 Antibody such as this Insulin Growth Factor Antibody provides an additional monoclonal clone for investigating the expression and biological roles of insulin-like growth factor 1.

For an alternative IGF1 reagent with western blot, immunofluorescence, flow cytometry, and tissue-based validation, see our IGF1 Antibody / Somatomedin C Antibody page.

Application Notes

The optimal dilution of the IGF-1 Antibody SPM406 / Insulin Growth Factor Antibody for each application should be determined by the researcher.

1. Required HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

Immunogen

Purified human IGF1 protein was used as the immunogen for this IGF-1 Antibody SPM406.

Storage

Store the IGF-1 Antibody SPM406 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

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

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