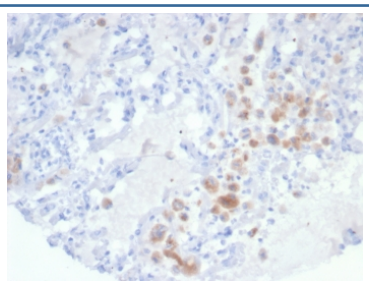
Insulin Receptor Substrate 1 Antibody IRS1/7571 / IRS1 Monoclonal Antibody [clone IRS1/7571] (V4958)

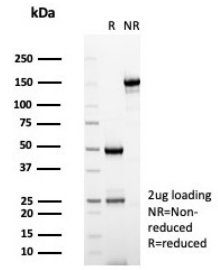
Catalog No.	Formulation	Size
V4958-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4958-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4958SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	IRS1/7571
Purity	Protein A/G affinity
UniProt	P35568
Localization	Cytoplasm, Cell surface, Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Insulin Receptor Substrate 1 Antibody IRS1/7571 / IRS1 Monoclonal Antibody is available for research use only.



Insulin Receptor Substrate 1 Antibody IRS1/7571 Staining in Human Lung by IHC. Immunohistochemistry staining of FFPE human lung tissue with Insulin Receptor Substrate 1 Antibody (clone IRS1/7571) shows brown immunoreactivity in a subset of cells, with predominantly cytoplasmic staining and numerous surrounding cells remaining weakly stained or negative. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling before testing. The localized staining demonstrates detection of IRS1 in human lung tissue using this IRS1 Monoclonal Antibody.



Insulin Receptor Substrate 1 Antibody IRS1/7571 Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of 2 ug purified, BSA-free Insulin Receptor Substrate 1 Antibody (clone IRS1/7571) shows the expected immunoglobulin migration pattern. Under reducing conditions, distinct heavy and light chains migrate at approximately 50 kDa and 25 kDa, respectively, while the non-reduced antibody migrates as an intact immunoglobulin at approximately 150 kDa. The expected reduced and non-reduced migration profiles support the integrity and purity of this IRS1 Monoclonal Antibody preparation.

Description

Insulin Receptor Substrate 1 Antibody IRS1/7571 recognizes IRS1, a cytoplasmic signaling adaptor that transmits signals from activated insulin and insulin-like growth factor receptors to downstream pathways. IRS1 lacks intrinsic enzymatic activity and instead functions as a molecular platform for assembling signaling complexes. Following receptor activation, phosphorylation of IRS1 creates docking sites for intracellular signaling proteins, connecting extracellular metabolic and growth signals with coordinated cellular responses.

IRS1 is an important mediator of insulin receptor signaling and contributes to activation of pathways including PI3K-AKT and RAS-MAPK. Through these signaling networks, IRS1 participates in glucose metabolism, protein and lipid synthesis, cell growth, survival, and differentiation. IRS1 activity is regulated through phosphorylation at numerous tyrosine, serine, and threonine residues, providing multiple mechanisms through which receptor activity, nutrient availability, and cellular feedback can influence insulin-responsive signaling.

Altered IRS1 expression and signaling are extensively investigated in insulin resistance, diabetes, metabolic disease, and cancer biology. Changes in IRS1 abundance, phosphorylation, localization, or degradation can modify cellular responsiveness to insulin and other growth factors. IRS1-mediated signaling is also studied in malignant cells because pathways downstream of this adaptor can influence proliferation, survival, metabolism, and responses to extracellular growth signals.

Clone IRS1/7571 is a mouse monoclonal antibody generated against a recombinant fragment corresponding to a region within amino acids 1-200 of human IRS1. This IRS1 Monoclonal Antibody provides a defined reagent for investigating insulin receptor substrate 1 expression and complements antibodies directed toward other components of insulin and growth factor signaling pathways. NSJ Bioreagents supplies clone IRS1/7571 for research use only.

An Insulin Receptor Substrate 1 Antibody can be used to investigate IRS1 expression, insulin receptor signaling, insulin-like growth factor signaling, PI3K-AKT and MAPK pathways, glucose metabolism, insulin resistance, and cancer biology.

For broader IRS1 validation across multiple tissues, cell lines, and applications, see our IRS1 Antibody 10I3 / Insulin Receptor Substrate 1 Monoclonal Antibody page.

Application Notes

Optimal dilution of the Insulin Receptor Substrate 1 Antibody IRS1/7571 / IRS1 Monoclonal Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the Insulin Receptor Substrate 1 Antibody IRS1/7571.

Storage

Aliquot the Insulin Receptor Substrate 1 Antibody IRS1/7571 and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

IRS1 antibody, IRS-1 antibody, insulin receptor substrate-1 antibody, HIRS-1 antibody

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