

IRS1 (Insulin receptor substrate 1) Antibody

Mouse Monoclonal Antibody [Clone IRS1/7571]

Catalog No	Format	Size
3667-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3667-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3667-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

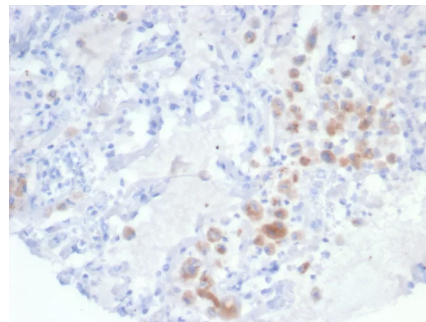
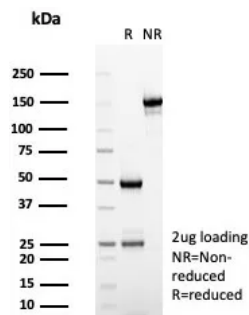
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	IRS1/7571
Gene Name	IRS1
Immunogen	Recombinant fragment (around aa1-200) of human IRS1 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	170-185kDa
Cellular Localization	Cytoplasm. Cell Surface. Nucleus.
Species Reactivity	Human
Positive Control	adrenal gland or lung. Human breast carcinoma

*Optimal dilution for a specific application should be determined.

Product Images for IRS1 (Insulin receptor substrate 1) Antibody



SDS-PAGE Analysis of Purified IRS1 Mouse Monoclonal Antibody (IRS1/7571). Confirmation of Purity and Integrity of Antibody.

Formalin-fixed, paraffin-embedded human lung stained with IRS1 Mouse Monoclonal Antibody (IRS1/7571). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

Specificity & Comments

The Insulin receptor substrate-1 (IRS-1), a protein major substrate of the Insulin receptor, is phosphorylated in response to stimulation of cells by Insulin, Insulin-like growth factor 1 (IGF-1) and interleukin 4 (IL-4). IRS-1 is phosphorylated on serine, threonine and tyrosine residues in a variety of tissues. An Insulin-sensitive serine/threonine kinase casein kinase II mediates a portion of the Insulin-stimulated serine/threonine phosphorylation of overexpressed IRS-1 in vivo. Thr 502 is identified as the major casein kinase II catalyzed phosphorylation site in rat IRS-1, and Ser 99 is an additional phosphorylation site catalyzed by casein kinase II. Thus, casein kinase II catalyzed phosphorylation of IRS-1 may be a component of the intracellular Insulin signaling cascade. IRS-1 contains three putative binding sites for 14-3-3 (Ser 270, Ser 374 and Ser 641) and the motif around Ser 270 is located in the phosphotyrosine binding domain of IRS-1, which is responsible for the interaction with the Insulin receptor. The association of 14-3-3 with IRS-1 increases significantly upon treatment with okadaic acid, a potent serine/threonine phosphatase inhibitor. Therefore, the association of 14-3-3 protein may play a role in the regulation of Insulin sensitivity by interrupting the association between the Insulin receptor and IRS-1.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

AKT Signaling, Cardiovascular, Cytokine Signaling, Immunology, Infectious Disease, Neuroinflammation, Signal Transduction