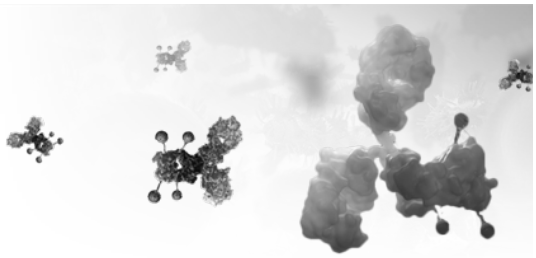

Mouse Anti-Human INSR Monoclonal Antibody, clone 94-8 (CABT-Z172M)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Human insulin receptor antibody is a murine monoclonal antibody (IgG1) that recognizes an epitope within amino acids 140-301 (the cysteine rich region) of the extracellular domain of the human insulin receptor. The antibody enhances the binding of insulin to the insulin receptor of 3T3 cells and stimulates insulin-mediated thymidine incorporation in these cells.
Specificity	Cross-reacts with the human insulin receptor but not the rat insulin receptor or the human type 1 IGF receptor.
Immunogen	IM9 lymphocyte preparation
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	94-8
Purification	Purified from conditioned medium by Protein A affinity chromatography.
Conjugate	Unconjugated
Applications	WB, IP, EIA Recommended concentration: WB: 1:5000 IP: 1:5000 EIA: 1:5000 Each application and titre should be determined in house.
Reconstitution	Dissolve in 200 µl phosphate buffered saline pH 7.4.

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Format	Lyophilized
Size	200 µg
Preservative	None
Storage	At least 2 years at 2 - 4 °C (lyophilized). After reconstitution store at -20 °C or -80 °C. Avoid freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	The insulin receptor (IR) is a heterodimeric protein complex that has an intracellular β subunit and an extracellular α subunit, which is disulfide- linked to a transmembrane segment. The insulin ligand binds to the IR and initiates molecular signaling pathways that promote glucose uptake in cells and glycogen synthesis. Insulin binding to IR induces phosphorylation of intracellular tyrosine kinase domains and recruitment of multiple SH2 and SH3 domaincontaining intracellular proteins that serve as signaling intermediates for pleiotropic effects of insulin. The human insulin receptor gene maps to chromosome 19p13.3-p13.2 and encodes a 1382 amino acid protein that cleaves to form α and β subunits. Type 1 diabetes is an autoimmune condition of the endocrine pancreas that results in destruction of insulin secreting cells and a progressive loss in insulin-sensitive glucose uptake by cells. Type 2 diabetes is a condition where cells become resistant to insulin action.
Keywords	CD220;HHF5;HIR A;INSR;Insulin receptor;Insulin receptor subunit alpha;IR antibody

GENE INFORMATION

Gene Name	INSR
Entrez Gene ID	3643
UniProt ID	P06213

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