



Rabbit Anti-Human IRS1 monoclonal antibody, clone TE3157 (CABT-L789)

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

PRODUCT INFORMATION

Target	IRS1
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	TE3157
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC
Molecular Weight	170 kDa
Cellular Localization	Cytoplasm,Nucleus.
Positive Control	SW480, MCF-7, Hela, human breast carcinoma tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
Preservative	0.05% Sodium Azide

Storage

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction

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.

Keywords

HIRS 1;HIRS1;Insulin receptor substrate 1;IRS 1;IRS-1;IRS1;IRS1_HUMAN;OTTHUMP00000164234 antibody

GENE INFORMATION

Entrez Gene ID

[56158](#)

UniProt ID

[A0A024R3E7](#)
