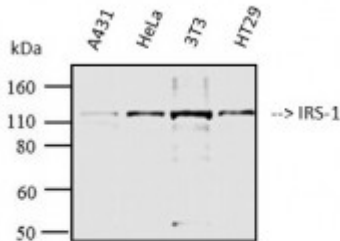


Anti-IRS-1 antibody



Western Blot (WB) analysis of 1)A431, 2)HeLa, 3)3T3, 4)HT29 cell lysates using IRS-1 Antibody (STJ93769).



Description

IRS-1 is a protein encoded by the IRS1 gene which is approximately 131,5 kDa. IRS-1 is localised to the cytoplasm and nucleus. It is involved in RET signalling, regulation of lipid metabolism, insulin signalling-generic cascades and the IL-2 pathway. It is a protein which is phosphorylated by insulin receptor tyrosine kinase. It may mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor it binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. IRS-1 is expressed in the liver, muscle, eye, nervous system and pancreas. The IRS1 gene may be involved in non-insulin-dependent diabetes mellitus. STJ93769 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of IRS-1 protein.

Model	STJ93769
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human IRS-1 around the non-phosphorylation site of S636.
Immunogen Region	570-650 aa
Gene ID	3667
Gene Symbol	IRS1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity	IRS-1 Polyclonal Antibody detects endogenous levels of IRS-1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Insulin receptor substrate 1 IRS-1
Molecular Weight	180 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:61250MIM:125853
Alternative Names	Insulin receptor substrate 1 IRS-1
Function	May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit .
Post-translational Modifications	Serine phosphorylation of IRS1 is a mechanism for insulin resistance. Ser-312 phosphorylation inhibits insulin action through disruption of IRS1 interaction with the insulin receptor . Phosphorylation of Tyr-896 is required for GRB2-binding . Phosphorylated by ALK. Phosphorylated at Ser-270, Ser-307, Ser-636 and Ser-1101 by RPS6KB1; phosphorylation induces accelerated degradation of IRS1. Ubiquitinated by the Cul7-RING(FBXW8) complex in a mTOR-dependent manner, leading to its degradation: the Cul7-RING(FBXW8) complex recognizes and binds IRS1 previously phosphorylated by S6 kinase (RPS6KB1 or RPS6KB2).