

Product datasheet for **TA354425**

IRS1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	Dot, WB
Recommended Dilution:	WB 0.1-1 µg/ml ELISA 0.01-0.1 µg/ml IP 2-5 µg/ml IHC 2-10 µg/ml FC 5-10 µg/ml
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	A synthetic peptide corresponding to the epitope ATSPA with a single phosphorylation site Ser 312 of human IRS-1.
Formulation:	This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer.
Purification:	The Rabbit IgG is purified by site-modified Epitope Affinity Purification.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	165 kDa
Gene Name:	insulin receptor substrate 1
Database Link:	NP_005535 Entrez Gene 16367 Mouse Entrez Gene 25467 Rat Entrez Gene 3667 Human P35568



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Background:

Insulin Receptor Substrate-1 (IRS-1), 165 kDa cytoplasmic docking protein, is one of the major endogenous substrates of the insulin receptor kinase. IRS-1 contains multiple tyrosine phosphorylation motifs that serve as docking sites for SH2 domain containing proteins, which mediate the metabolic and growth promoting functions of insulin. IRS-1 also contains over 30 potential serine/threonine phosphorylation sites. Ser312 of IRS-1 is phosphorylated by JNK and IKK and Ser789 is phosphorylated by SIK-2, a member of AMPK family. The phosphorylation of Tyr612 and Ser636/639 is mediated by the PKC and mTOR pathways, respectively and phosphorylation at Ser1101 is mediated by PKC, resulting in an inhibition of insulin signaling in the cell, suggesting a potential mechanism for insulin resistance in some models of obesity.

Synonyms:

HIRS-1

Protein Families:

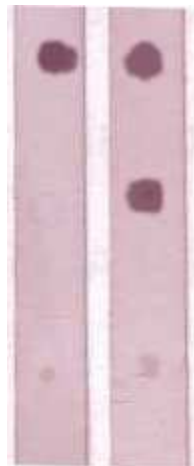
Druggable Genome

Protein Pathways:

Adipocytokine signaling pathway, Insulin signaling pathway, Neurotrophin signaling pathway, Type II diabetes mellitus

Product images:


WB: The cell lysate derived from insulin stimulated CHO was immunoprecipitated by Rabbit anti-IRS-1 (pS312) antibody, then immunoprobed by the same antibody at 1:500 (lane 1). Lane 2 is a negative control.



DB: 1 ug peptide was blot onto NC membrane A: IRS-1 (pS312) B: IRS-1 (non phosphorylated) C: Non-related Phosphopeptide) Followed by rabbit antibodies incubation at a 1:1000 dilution: 1: Rabbit anti-IRS-1 (pS312) 2: Rabbit anti-IRS-1 (Paired S312)