

AP20832PU-N**Polyclonal Antibody to IRS1 pSer639 - Aff - Purified**

Alternate names:	IRS-1, Insulin receptor substrate 1
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	Insulin receptor substrate-1 (IRS-1) is a 170-185 kDa substrate of the insulin receptor that undergoes phosphorylation in response to insulin, IGF-1 and IL-4. Tyrosine (Tyr) phosphorylation of IRS-1 mediates insulin-stimulated responses, while Serine (Ser)/Threonine (Thr) phosphorylation of IRS-1 can either enhance or negate insulin effects. Tyrosines 465, 612, 632, 662, 941 and 989 of IRS-1 resemble YXXM motifs that upon phosphorylation are predicted to bind SH2 domains in the p85 regulatory subunit of PI3K, resulting in activation of p110 catalytic subunit. SHP-2 binding to IRS-1 can occur upon phosphorylation at Tyr 1179 and Tyr 1229. GRB2 binding can occur upon phosphorylation at Tyr 896. Rodent Ser 99 and Thr 502 of IRS-1 are casein kinase II-dependent phosphorylation sites. There is an increase in Ser 636 phosphorylation of IRS-1 in primary skeletal muscle cells from patients with type 2 diabetes.
Uniprot ID:	P35568
NCBI:	NP_005535
GeneID:	3667
Host:	Rabbit
Format:	State: Liquid purified Ig fraction Purification: Affinity chromatography (> 95% (by SDS-PAGE)) Buffer System: Phosphate buffered saline (PBS), pH 7.2. Preservatives: 0.05% sodium azide
Applications:	Immunohistochemistry on paraffin sections: 1/50 - 1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	~132, 180 kDa
Specificity:	This antibody detects endogenous levels of IRS-1 protein only when phosphorylated at Ser639.
Species Reactivity:	Tested: Human. Expected from sequence similarity: Mouse and Rat.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Pictures:

Immunohistochemistry (IHC) analyzes of p-IRS-1 antibody (Cat.-No.: AP20832PU-N) in paraffin-embedded human breast carcinoma tissue.

