

Product datasheet for AP06529PU-M

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OriGene Technologies, Inc.

IRS1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC

Recommended Dilution: Immunohistochemistry on paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit
Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to amino acids 750-800 of Human IRS-1.

Specificity: This antibody detects endogenous levels of IRS-1 protein.

(region surrounding Leu789)

Formulation: Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction Preservative: 0.05% sodium azide

Concentration: 1.0 mg/ml

Purification: Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 132, 180 kDa

Gene Name: insulin receptor substrate 1

Database Link: Entrez Gene 3667 Human

P35568





Background:

IRS-1, a 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 insulinsensitive 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 phosphortyrosine binding domain of IRS-1, which is responsible for the interaction with the insulin receptor.

Synonyms: Insulin receptor substrate 1, IRS-1

Product images:



Immunohistochemistry (IHC) analysis of IRS-1 antibody in paraffin-embedded human brain tissue.