

IRS-4 Rabbit pAb

Catalog # AP98730

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Z0Y7
Other Accession	Q9Z0Y7
Reactivity	Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	130147
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse IRS-4
Epitope Specificity	401-500/1216
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 IRS-type PTB domain. Contains 1 PH domain.
SUBUNIT	Interacts with CRK and CRKL. Interaction with CRK is stronger than with CRKL. Interacts with CRK via the phosphorylated YXXM motifs. Interacts with PLC-gamma, SHC1, PTK6, PPP4C and NISCH. Interacts with SOCS6 in response to stimulation with either insulin or IGF1. Interacts with PIK3R1 and GRB2.
Post-translational modifications	Phosphorylated on tyrosine residues in response to both insulin and IGF1 signaling. Phosphorylated on Tyr-894 in response to FGF2 signaling. Phosphorylation of Tyr-894 is required for GRB2, phospholipase C-gamma and phosphatidylinositol 3-kinase interaction.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	IRS4 (Insulin receptor substrate 4) is a cytoplasmic protein that contains many potential tyrosine and serine/threonine phosphorylation sites. Tyrosine-phosphorylated IRS4 protein has been shown to associate with cytoplasmic signaling molecules that contain SH2 domains. The IRS4 protein is phosphorylated by the insulin receptor tyrosine kinase upon receptor stimulation.

Additional Information

Gene ID	16370
Other Names	CHNG9; IRS-4; PY160; IRS4_HUMAN; IRS4; 160 kDa phosphotyrosine protein (py160); Phosphoprotein of 160 kDa (pp160); IRS4_MOUSE; insulin receptor substrate 4
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Irs4
Function	Acts as an interface between multiple growth factor receptors possessing tyrosine kinase activity, such as insulin receptor, IGF1R and FGFR1, and a complex network of intracellular signaling molecules containing SH2 domains. Involved in the IGF1R mitogenic signaling pathway. Promotes the AKT1 signaling pathway and BAD phosphorylation during insulin stimulation without activation of RPS6KB1 or the inhibition of apoptosis. Interaction with GRB2 enhances insulin- stimulated mitogen-activated protein kinase activity. May be involved in nonreceptor tyrosine kinase signaling in myoblasts. Plays a pivotal role in the proliferation/differentiation of hepatoblastoma cell through EPHB2 activation upon IGF1 stimulation. May play a role in the signal transduction in response to insulin and to a lesser extent in response to IL4 and GH on mitogenesis. Plays a role in growth, reproduction and glucose homeostasis. May act as negative regulators of the IGF1 signaling pathway by suppressing the function of IRS1 and IRS2.
Cellular Location	Cell membrane; Peripheral membrane protein; Cytoplasmic side
Tissue Location	Expressed in skeletal muscle, brain, heart, kidney and liver.

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