

# IRS4 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP12330b

## **Specification**

## IRS4 Antibody (C-term) Blocking peptide - Product Information

**Primary Accession** 

014654

## IRS4 Antibody (C-term) Blocking peptide - Additional Information

**Gene ID 8471** 

#### **Other Names**

Insulin receptor substrate 4, IRS-4, 160 kDa phosphotyrosine protein, py160, Phosphoprotein of 160 kDa, pp160, IRS4

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## IRS4 Antibody (C-term) Blocking peptide - 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 myoblasts. Expressed in liver and hepatocellular carcinoma.



# IRS4 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

### • Blocking Peptides

IRS4 Antibody (C-term) Blocking peptide - Images

## IRS4 Antibody (C-term) Blocking peptide - Background

IRS4 encodes the insulin receptor substrate 4, acytoplasmic protein that contains many potential tyrosine andserine/threonine phosphorylation sites. Tyrosine-phosphorylatedIRS4 protein has been shown to associate with cytoplasmicsignalling molecules that contain SH2 domains. The IRS4 protein isphosphorylated by the insulin receptor tyrosine kinase upon receptor stimulation..

# IRS4 Antibody (C-term) Blocking peptide - References

Dong, X., et al. Gastroenterology 139(2):464-473(2010)Bailey, S.D., et al. Diabetes Care (2010) In press:Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Shimwell, N.J., et al. Oncogene 28(5):686-697(2009)Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008)