

## Anti-Phospho-IRS1 (Ser307)

Rabbit Polyclonal Antibody

Catalog # **140-365CR**

Lot # B3216-54

### Cited Applications

ELISA, IHC, WB

Ideal working dilutions for each application should be empirically determined by the investigator.

### Specificity

Recognizes the human IRS1 protein phosphorylated at Serine 307

### Cross Reactivity

Human

### Host/Isotype/Clone#

Rabbit, IgG

### Immunogen

The antibody was produced against synthesized peptide corresponding to amino acids 298-316 of human IRS1 protein.

### Formulation

0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide

### Stability

1yr at -20°C from date of shipment

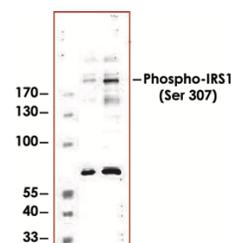
### Scientific Background

IRS1 is the substrate for the insulin tyrosine kinase receptor and is found in a variety of insulin-responsive cells and tissues. IRS1 protein has no intrinsic enzymatic activity but acts as a docking protein, via the SH2 domains, for mediating the insulin downstream signaling events. IRS1 has been shown to associate with the 14-3-3 family of proteins and this could play a role in the regulation of insulin sensitivity by interrupting the association between the insulin receptor and IRS1 (1). IRS1 may be associated with colorectal cancer and diet and related factors may affect the risk by modifying plasma insulin levels. Thus, the inter-individual variation in insulin signaling mediated by IRS1 may play a plausible role in the development of colorectal cancer (2).

### References:

- Ogihara, T. et al: 14-3-3 protein binds to insulin receptor substrate-1, one of the binding sites of which is in the phosphotyrosine binding domain. J. Biol. Chem. 272: 25267-25274, 1997.
- Slattery, M.L. et al: Genetic variation in IGF1, IGFBP3, IRS1, IRS2 and risk of breast cancer in women living in outwestern United States. Breast Cancer Res Treat. 2007.

### Sample Data



Western blot using Anti-Phospho-IRS1 (Ser307) (1:250 dilution). Lane 1 shows staining of human 293 cell lysate. Lane 2 shows staining of 293 cell lysate prepared from cells serum-starved for 18 h followed by treatment with 5 µg/ml of anisomycin for 30 min. Approximately 25 µg of each lysate was used per lane.

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Purification	Immunoaffinity chromatography
Stability	1yr at -20°C from date of shipment
Storage & Shipping	Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

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[www.signalchem.com](http://www.signalchem.com)

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