

## **Anti-IRS1 Picoband Antibody**

Catalog # ABO11914

# **Specification**

# **Anti-IRS1 Picoband Antibody - Product Information**

Application WB, IHC
Primary Accession P35568
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Insulin receptor substrate 1(IRS1) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-IRS1 Picoband Antibody - Additional Information**

**Gene ID 3667** 

### **Other Names**

Insulin receptor substrate 1, IRS-1, IRS1

## Calculated MW 131591 MW KDa

# **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Mouse, Rat, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human<br/>cbr>

### **Protein Name**

Insulin receptor substrate 1

#### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

E.coli-derived human IRS1 recombinant protein (Position: S1041-Q1242). Human IRS1 shares 78% and 80% amino acid (aa) sequences identity with mouse and rat IRS1, respectively.

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**

No cross reactivity with other proteins

Storage At -20°C for one year. After r°Constitution,

Tel: 858.875.1900 Fax: 858.875.1999



at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities** Contains 1 IRS-type PTB domain.

## **Anti-IRS1 Picoband Antibody - Protein Information**

#### Name IRS1

### **Function**

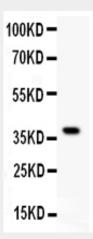
May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit (By similarity).

# **Anti-IRS1 Picoband Antibody - Protocols**

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

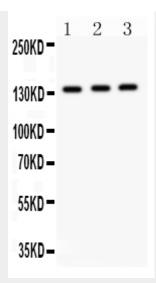
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-IRS1 Picoband Antibody - Images**

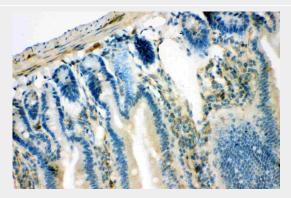


Anti- IRS1 antibody, ABO11914, Western blottingAll lanes: Anti IRS1 (ABO11914) at 0.5ug/mlWB: Recombinant Human IRS1 Protein 0.5ngPredicted bind size: 39KDObserved bind size: 39KD

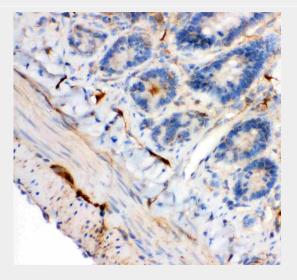




Anti- IRS1 antibody, ABO11914, Western blottingAll lanes: Anti IRS1 (ABO11914) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: MM453 Whole Cell Lysate at 40ugLane 3: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 132KDObserved bind size: 132KD

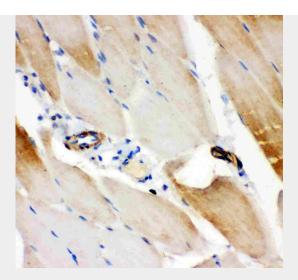


Anti- IRS1 antibody, ABO11914, IHC(P)IHC(P): Mouse Intestine Tissue

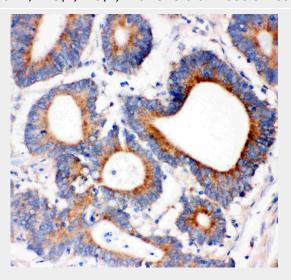


Anti- IRS1 antibody, ABO11914, IHC(P)IHC(P): Rat Intestine Tissue

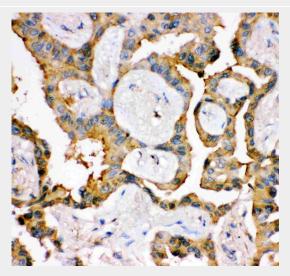




Anti- IRS1 antibody, ABO11914, IHC(P)IHC(P): Rat Skeletal Muscle Tissue



Anti- IRS1 antibody, ABO11914, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti- IRS1 antibody, ABO11914, IHC(P)IHC(P): Human Lung Cancer Tissue

**Anti-IRS1 Picoband Antibody - Background** 





Tel: 858.875.1900 Fax: 858.875.1999

Insulin receptor substrate 1(IRS-1) is a signalling adapter protein that in humans is encoded by the IRS-1 gene. It is mapped to 2q36.3. This gene exhibited no intrinsic enzyme activity, and it can serve as a docking protein involved in binding and activating other signal transduction molecules after being phosphorylated on tyrosine by insulin receptor kinase. IRS1 plays a key role in transmitting signals from the insulin and insulin-like growth factor-1(IGF-1) receptors to intracellular pathways PI3K/Akt and Erk MAP kinase pathways. IRS1 also has important biological function for both metabolic and mitogenic(growth promoting) pathways. In addition to those, IRS1 is a key regulator of PI3K within malignant cells.