



Rabbit anti IRS-1(Paired S312) Polyclonal Antibody

Alternative Name(s): Insulin receptor substrate 1; IRS1

Order Information

- **Description:** IRS-1(Paired S312)
- **Catalogue:** 602-620
- **Lot:** See label
- **Size:** 100ug/200ul
- **Host:** Rabbit
- **Clone:** nan
- **Application:** IHC(P), WB
- **Reactivity:** Hu, Ms, Rt

ANTIGEN PREPARATION

A synthetic peptide corresponding to the epitope ATSPA without phosphorylation of human IRS-1.

BACKGROUND

Insulin Receptor Substrate-1 (IRS-1), 165 kDa cytoplasmic docking protein, is one of the major endogenous substrates of the insulin receptor kinase. IRS-1 contains multiple tyrosine phosphorylation motifs that serve as docking sites for SH2 domain containing proteins, which mediate the metabolic and growth promoting functions of insulin. IRS-1 also contains over 30 potential serine/threonine phosphorylation sites. Ser312 of IRS-1 is phosphorylated by JNK and IKK and Ser789 is phosphorylated by SIK-2, a member of AMPK family. The phosphorylation of Tyr612 and Ser636/639 is mediated by the PKC and mTOR pathways, respectively and phosphorylation at Ser1101 is mediated by PKC, resulting in an inhibition of insulin signaling in the cell, suggesting a potential mechanism for insulin resistance in some models of obesity.

PURIFICATION

The Rabbit IgG is purified by Epitope Affinity Purification

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes ~165 kDa of human IRS-1 (without phosphorylation at Ser312). It also reacts with mouse and rat. The other species are not tested.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

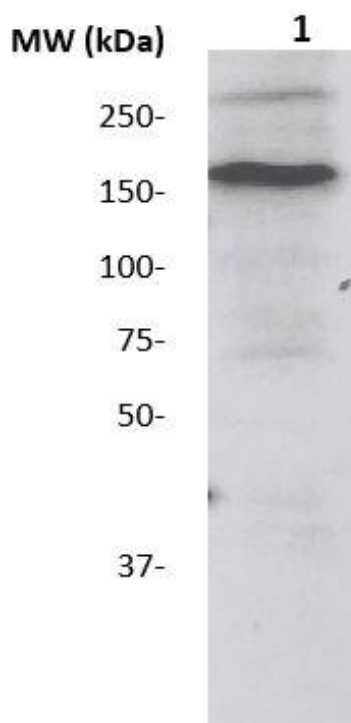
- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 165.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

*Optimal dilutions should be determined by researchers for the specific applications.

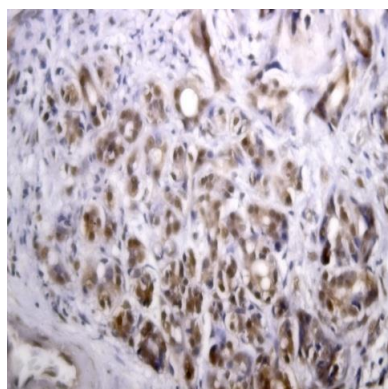
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DATA ATTACHMENTS



Western Blot: The whole lysate derived from MCF7 (20 ug/lane) immunoblotted by Rabbit anti – IRS1 (Paired312) (Cat# 602-620) at 1:500. Observed a major immunoreactive band at molecular weight ~165kDa.



Immunohistochemistry: Human Breast carcinoma (FFPE) stained with Rabbit anti-IRS1 (paired S312) (Cat# 602-620) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES

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