



Rabbit anti IRS-1 (pS312) Polyclonal Antibody

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

Order Information

- **Description:** IRS-1 (pS312)
- **Catalogue:** 500-8984
- **Lot:** See label
- **Size:** 100ug/200ul
- **Host:** Rabbit
- **Clone:** nan
- **Application:** IHC(P), WB
- **Reactivity:** Hu/Rt/Ms

ANTIGEN PREPARATION

A synthetic peptide corresponding to the epitope ATSPA with a single phosphorylation site Ser 312 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 site-modified Epitope Affinity Purification.

FORMULATION

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

SPECIFICITY

This antibody recognizes ~165 kDa of human IRS-1 (pSer312). 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*

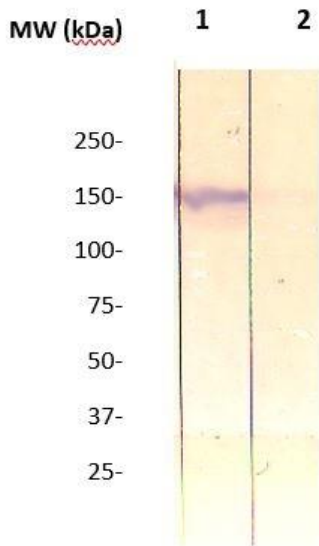
- Western Blot: 0.1-1 µg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 165.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

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

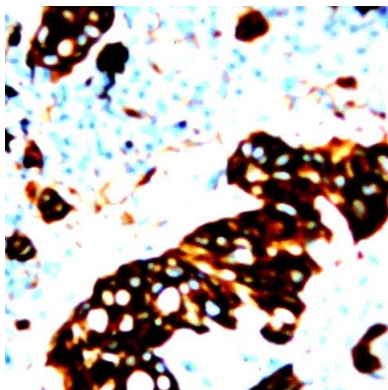
FOR RESEARCH USE ONLY.

AbboMax, Inc 2528 Qume Drive, Suite 8, San Jose, California 95131, USA
1 408-573-1898 (Tel). 1 408-573-1858 (Fax). www.abbomax.com info@abbomax.com

DATA ATTACHMENTS



Western Blot: The cell lysate derived from insulin stimulated CHO was immunoprecipitated by Rabbit anti IRS-1 (pS312), (Cat#500-8984), then immunoprobed by the same antibody at 1:500 (lane 1). Lane 2 is a negative control. Observed a major immunoreactive band at molecular weight ~165 kDa.



Immunohistochemistry: Human Breast carcinoma (FFPE) stained with Rabbit anti-IRS1(pS312) (Cat# 500-8984) 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

FOR RESEARCH USE ONLY.