

AbboMax, Inc

Innovation at Work

Rabbit anti Phospho- IRS-1(pSer³¹²) Antibody

Synonym: Anti-phospho-IRS-1 (pSer³¹²), Insulin-receptor substrate 1 (IRS-1).

Order Information

Description: Rabbit anti IRS-1 (p Ser³¹²)
Catalogue#: 500-8984
Lot#: See the label
Size: 100 ug/200 ul
Host: Rabbit
Clone: N/A
Application: ELISA, WB, IHC
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-specific Epitope Affinity Purification.

SPECIFICITY

This antibody recognizes ~165 kDa of human IRS-1 (pSer312). It also reacts with mouse and rat. The other species are not tested.

FORMULATION

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

STORAGE

The antibodies are stable for 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2°C-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

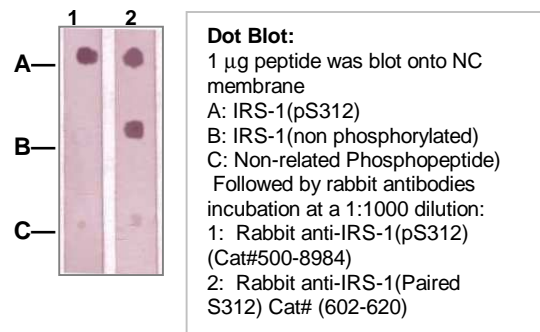
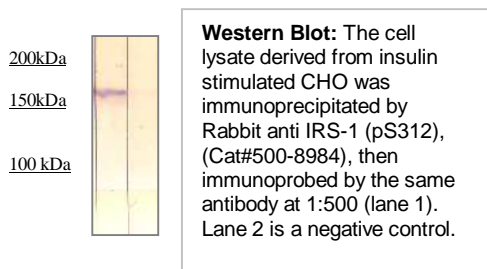
APPLICATIONS/SUGGESTED WORKING DILUTIONS

| | |
|---------------------|----------------|
| Western Blot | 0.1-1 µg/ml |
| ELISA | 0.01-0.1 µg/ml |
| Immunoprecipitation | 2-5 µg/ml |
| IHC | 0.5-2 µg/ml |
| Flow cytometry | Not tested |

| | |
|---------------------------|-----------------|
| MOLECULAR WEIGHT: | 165 kDa |
| POSITIVE CONTROL: | CHO cell lysate |
| CELLULAR LOCATION: | N/A |

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

DATA ATTACHMENTS



REFERENCES

Li, Y. et al. (2004) J. Biol. Chem. 279, 45304-45307.

FOR RESEARCH USE ONLY.