

#3015 Store at -20°C

## Insulin Receptor Substrate Antibody Sampler Kit

1 Kit (5 x 20 microliters)


**Cell Signaling**  
TECHNOLOGY®

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Phospho-IRS-1 (Ser307) Antibody	2381	20 µl	180 kDa	Rabbit
Phospho-IRS-1 (Ser612) (C15H5) Rabbit mAb	3203	20 µl	180 kDa	Rabbit IgG
IRS-2 Antibody	4502	20 µl	185 kDa	Rabbit
Phospho-IRS-1 (Ser318) (D51C3) Rabbit mAb	5610	20 µl	180 kDa	Rabbit IgG
IRS-1 (D23G12) Rabbit mAb	3407	20 µl	180 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

### Description

The Insulin Receptor Substrate Antibody Sampler Kit provides an economical means to investigate IRS-1 and IRS-2 signaling and phosphorylation within the cell. The kit contains enough antibody to perform two western blots with each primary antibody.

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Background

Insulin receptor substrate 1 (IRS-1) is one of the major substrates of the insulin receptor kinase (1). IRS-1 contains multiple tyrosine phosphorylation motifs that serve as docking sites for SH2-domain containing proteins that mediate the metabolic and growth-promoting functions of insulin (2-4). IRS-1 also contains over 30 potential serine/threonine phosphorylation sites. Ser307 of IRS-1 is phosphorylated by JNK (5) and IKK (6) while Ser789 is phosphorylated by SIK-2, a member of the AMPK family (7). The PKC and mTOR pathways mediate phosphorylation of IRS-1 at Ser612 and Ser636/639, respectively (8,9). Phosphorylation of IRS-1 at Ser1101 is mediated by PKCθ and results in an inhibition of insulin signaling in the cell, suggesting a potential mechanism for insulin resistance in some models of obesity (10).

### Background References

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