Insulin Receptor Substrate Antibody Sampler Kit

1 Kit (5 x 20 microliters)

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

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

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**


**Limited Uses**

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