

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human IRS1 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant mouse (rm) IRS1 (aa 898-1066) and no cross-reactivity with rmlIRS1 (aa 13-113), rmlIRS3, or recombinant human IRS2 is observed.                                               |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 614115                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human IRS1<br>Ala801-Ala1020 (predicted)<br>Accession # P35568                                                                                                                                                                          |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

Human IRS1 (insulin receptor substrate 1) is a 160-180 kDa substrate intermediate between the insulin and IGF-I receptor, and downstream signaling modulators. Upon insulin/IGF-I receptor activation, IRS1 is tyrosine phosphorylated, allowing its association with PI-3 kinase and GRB2. Human IRS1 is 1242 amino acids (aa) in length. It contains a PH (pleckstrin homology) domain (aa 12-115), followed by a PTB (phosphotyrosine-binding) domain (aa 160-263) and ten PEST (Pro/Glu/Ser/Thr) regions (aa 340-1225). IRS1 may be proteolytically cleaved at Arg656-Val657, generating a 90 kDa and 79 kDa fragment. Over aa 801-1020, human IRS1 is 88%, 86% and 88% aa identical to dog, mouse and pig IRS1, respectively.

## PRODUCT SPECIFIC NOTICES

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