

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Monoclonal Mouse IgG ₁ Clone # 614115
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IRS1 Ala801-Ala1020 (predicted) Accession # P35568
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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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