

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human and mouse IRS1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 395601
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IRS1 Ala801-Ala1020 (predicted) Accession # P35568
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

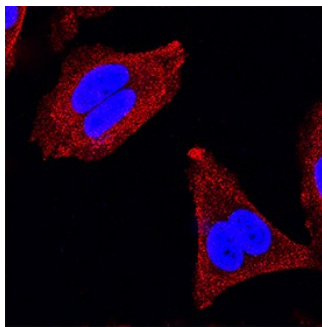
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



IRS1 in MCF-7 Human Cell Line. IRS1 was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human IRS1 Monoclonal Antibody (Catalog # MAB39781) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.