Human IRS2 Alexa Fluor® 594-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 676415

Catalog Number: FAB6347T

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IRS2 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human IRS1 or recombinant mouse IRS3 is observed.
Source	Monoclonal Mouse IgG_{2A} Clone # 676415
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human IRS2 Pro1035-Ile1136 Accession # Q9Y4H2
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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

IRS2 (insulin receptor substrate 2) is a 180-190 kDa substrate intermediate that lies between various cytokine receptors and downstream signaling molecules. It is the primary IRS protein found in hematopoietic cells. Depending upon the receptor, IRS2 undergoes phosphorylation, either via Tyk2 following type I IFN binding, or via JAK1 and 3 following IL-4, -7 and -15 binding. This event allows for its subsequent association with PI-3 kinase. Human IRS2 is 1338 amino acids (aa) in length with a predicted MW of 138 kDa. It contains one PH (pleckstrin homology) domain (aa 16-144), followed by a PTB (phosphotyrosine-binding)domain (aa 194-298) and seven YxxM (Tyr/x/x/Met) motifs (aa 540-1075). IRS2 is phosphorylated on multiple Ser and Tyr residues. There are two potential splice variants. One shows a 16 aa substitution for the C-terminal Glu, while another shows an 11 aa substitution for aa 1314-1338. Over aa 1035-1136, human IRS2 shares 86% aa identity with mouse IRS2.

PRODUCT SPECIFIC NOTICES

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