IRS-1 Antibody

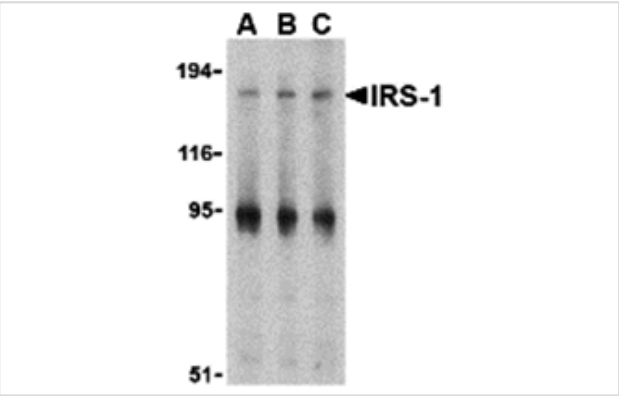
Catalog No: #24317

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

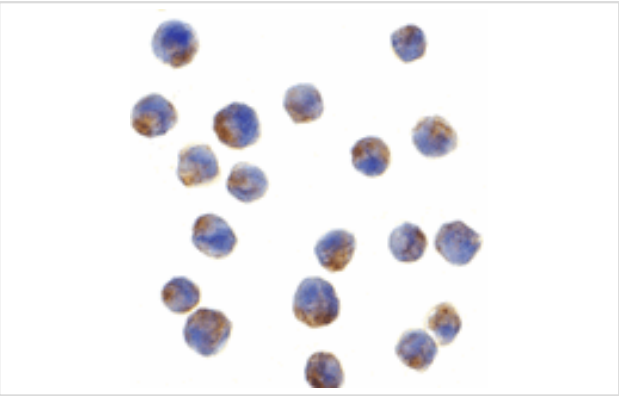
Description

Product Name	IRS-1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Affinity chromatography purified via peptide column
Applications	ELISA WB ICC
Species Reactivity	Hu Ms
Immunogen Type	Peptide
Immunogen Description	Raised against a 16 amino acid peptide from near the center of human IRS-1.
Target Name	IRS-1
Other Names	Insulin receptor substrate-1
Accession No.	P35568
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Images



Western blot analysis of IRS-1 in PC-3 cell lysate with IRS-1 antibody at (A) 1, (B) 2 and (C) 4 ug/mL.



Immunocytochemistry of IRS-1 in P815 cells with IRS-1 antibody at 2 ug/mL.

Background

Following tyrosine phosphorylation, the insulin receptor substrate 1 and 2 (IRS-1 and IRS-2) can form a protein scaffolding for the assembly of a host of Src homology 2 (SH2) domain-containing proteins. IRS-1 tyrosine phosphorylation can occur through the activity of several cytokine and growth factor receptors such as interleukin (IL)-4, IL-9, interferon-gamma, in addition to the insulin and insulin-like growth factor 1 receptors. The scaffolding provided by IRS-1 and IRS-2 is necessary for insulin signal transduction across the cell membrane. IRS-1 tyrosine phosphorylation, and thus formation of the IRS scaffolding is inhibited by tumor necrosis factor (TNF), and this inhibition can itself be blocked by rapamycin, an inhibitor of the mammalian target of rapamycin (TOR). TNF activity could also be blocked by inhibition of the Akt kinase and the PTEN tumor suppressor, suggesting that TNF impairs insulin signaling through IRS-1 by activation of the TOR signaling pathway.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.