abcam

Product datasheet

Anti-IRS1 (phospho S307) antibody ab5599

9 References   2 Images

Overview

Product name	Anti-IRS1 (phospho S307) antibody
Description	Rabbit polyclonal to IRS1 (phospho S307)
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC
Species reactivity	**Reacts with:** Mouse, Human
	Predicted to work with: Rat, African green monkey
Immunogen	Synthetic peptide corresponding to Human IRS1 aa 300-400 (phospho S307).
	Run BLAST with **Run BLAST with**
Positive control	WB: Jurkat treated for 20 minutes with 50 ng/ml of TNF alpha, whole cell lysate; NIH/3T3 treated for 20 minutes with 50 ng/ml of TNF alpha, whole cell lysates. ICC: T-47D cells
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.1% BSA
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Application	Abreviews	Notes
WB		Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 131 kDa (predicted molecular weight: 131 kDa).
ICC		Use a concentration of 1 - 2 µg/ml.

Target

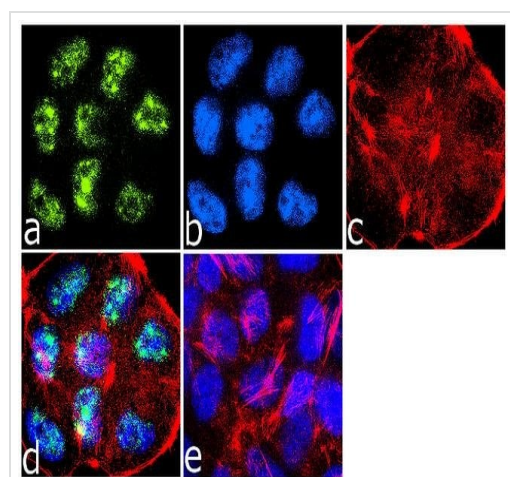|	
Function	May mediate the control of various cellular processes by insulin. When phosphorylated by the insulin receptor binds specifically to various cellular proteins containing SH2 domains such as phosphatidylinositol 3-kinase p85 subunit or GRB2. Activates phosphatidylinositol 3-kinase when bound to the regulatory p85 subunit.
Involvement in disease	Polymorphisms in IRS1 may be involved in the etiology of non-insulin-dependent diabetes mellitus (NIDDM) [MIM:125853].
Sequence similarities	Contains 1 IRS-type PTB domain. Contains 1 PH domain.
Post-translational modifications	Serine phosphorylation of IRS1 is a mechanism for insulin resistance. Ser-312 phosphorylation inhibits insulin action through disruption of IRS1 interaction with the insulin receptor. Phosphorylation of Tyr-896 is required for GRB2-binding.

Images

Immunocytochemistry analysis of 4% paraformaldehyde-fixed 0.25% Triton™ X-100 permeabilized T-47D cells (Human ductal breast epithelial tumor cell line) staining IRS1 with ab5599 at 1 µg/ml concentration and Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at 1/2000 dilution (green). Nuclei were stained with SlowFade® Gold Antifade Mountant with DAPI (blue) and F-actin was stained with Alexa Fluor® 555 Rhodamine Phalloidin (red). Negative control uses no primary antibody.

Immunocytochemistry - Anti-IRS1 (phospho S307) antibody (ab5599)
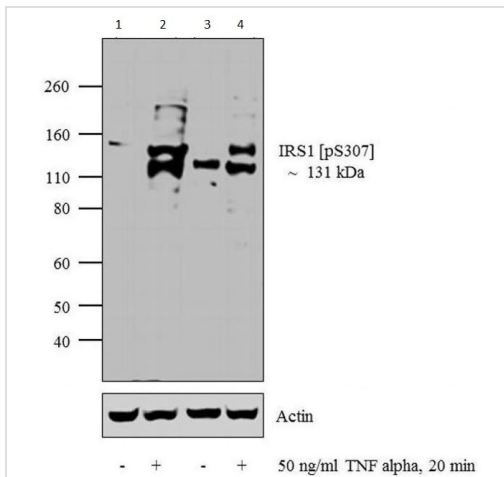
Western blot - Anti-IRS1 (phospho S307) antibody (ab5599)

All lanes : Anti-IRS1 (phospho S307) antibody (ab5599) at 3 µg/ml

Lane 1 : Jurkat whole cell lysates

Lane 2 : Jurkat treated for 20 minutes with 50 ng/ml of TNF alpha whole cell lysate

Lane 3 : NIH/3T3 whole cell lysates

Lane 4 : NIH/3T3 treated for 20 minutes with 50 ng/ml of TNF alpha whole cell lysates

Lysates/proteins at 30 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG (H+L) secondary antibody, HRP conjugate at 0.4 µg/ml

Developed using the ECL technique.

Predicted band size: 131 kDa
Observed band size: 131 kDa

Blocking buffer: 5% skimmed milk

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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