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Product datasheet

Anti-IRS1 antibody ab52167

56 References   3 Images

Overview

Product name	Anti-IRS1 antibody
Description	Rabbit polyclonal to IRS1
Host species	Rabbit
Tested applications	**Suitable for:** ELISA, WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human IRS1. Synthetic non-phosphopeptide derived from human IRS1 around the phosphorylation site of serine 307 (T-E-S-I-T).
	Database link: **P35568**
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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7
	Preservative: 0.02% Sodium azide
	Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS
	Without Mg+2 and Ca+2
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
WB		1/500 - 1/1000. Predicted molecular weight: 132 kDa.
IHC-P		1/50 - 1/100. Antigen retrieval: Microwave method - put the slice into 10 mmol/L citrate buffer (pH 6.0), microwave high temperature for 5 minutes, and then medium temperature for 15 minutes. Primary antibody incubation: 1 hour at 37°C Secondary antibody: Poly-HRP-Anti Mouse/Rabbit IgG, 50 µL for
ICC/IF		Use a concentration of 1 - 5 µg/ml.

Target

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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

Western blot - Anti-IRS1 antibody (ab52167)
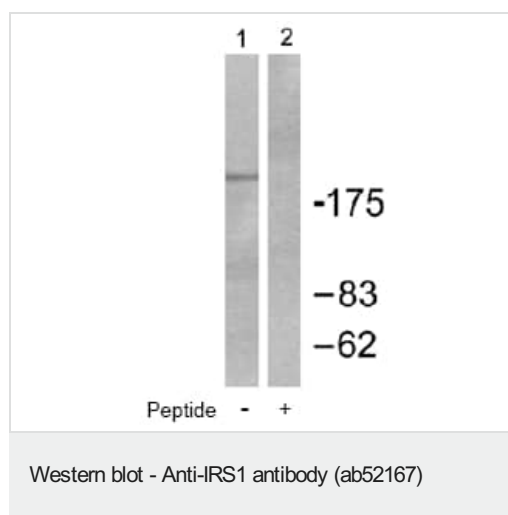
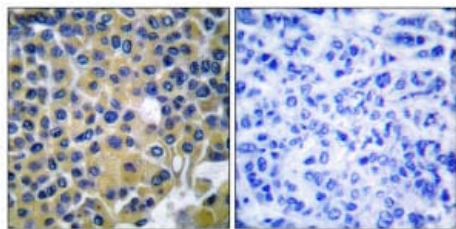**All lanes :** Anti-IRS1 antibody (ab52167) at 1/500 dilution

Lane 1 : A431 cell extract

Lane 2 : A431 cell extract with immunising peptide

Lysates/proteins at 5 µg per lane.
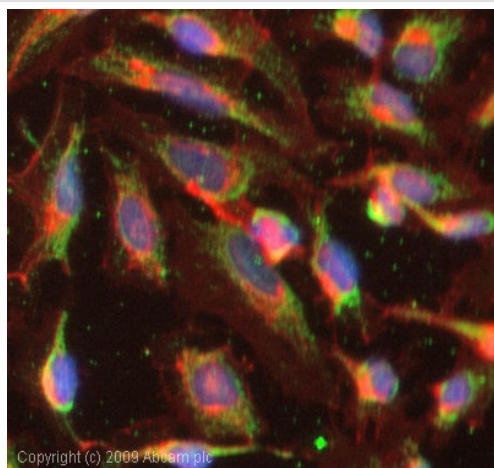
Predicted band size: 132 kDa

Observed band size: >175 kDa

ab52167 at 1/50 dilution staining IRS1 in human breast carcinoma by Immunohistochemsitry, Paraffin embedded tissue, in the absence or presence of the immunising peptide.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS1 antibody (ab52167)

ICC/IF image of ab52167 stained MCF7 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab52167, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Immunocytochemistry/ Immunofluorescence - Anti-IRS1 antibody (ab52167)

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