

Anti-IRS1 antibody ab131487

★★★★★ [2 Abreviews](#) [14 References](#) [4 Images](#)

Overview

Product name	Anti-IRS1 antibody
Description	Rabbit polyclonal to IRS1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide conjugated to KLH, surrounding internal sequence amino acids 634-638 (P-M-S-P-K) of Human IRS1 (NP_005535.1).
Positive control	293 cell extract; Human breast carcinoma tissue; HeLa cells.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride</p> <p>PBS without Mg²⁺ and Ca²⁺</p>
Purity	Immunogen affinity purified
Purification notes	ab131487 was purified by affinity chromatography using epitope specific peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab131487 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 180 kDa (predicted molecular weight: 131 kDa).
IHC-P		1/50 - 1/100.
ICC/IF		1/100 - 1/200.

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].

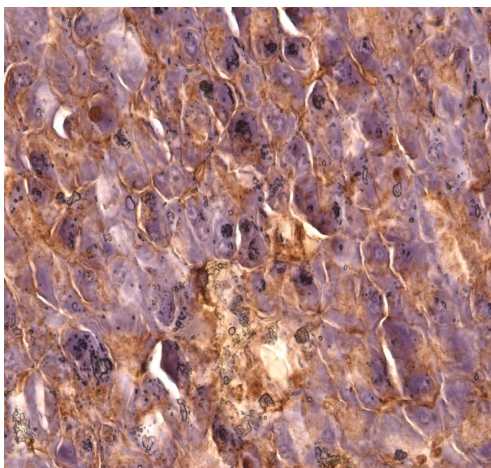
Sequence similarities

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.

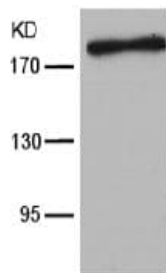
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of formaldehyde-fixed DB mice pancreas tissue staining with ab131487 at 1/50 dilution. Secondary antibody was ready to use HRP ImmPRESS Goat anti-rabbit IGG. Samples were incubated with the primary antibody with SignalStain antibody diluent for 18 hours at 4°C. Blocking was done using 100% Bloxall for 20 minutes at 20°C. Heat mediated antigen retrieval with Tris-EDTA pH9

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS1 antibody (ab131487)

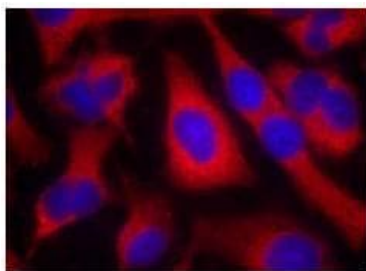
This image is courtesy of an anonymous Abreview.



Western blot - Anti-IRS1 antibody (ab131487)

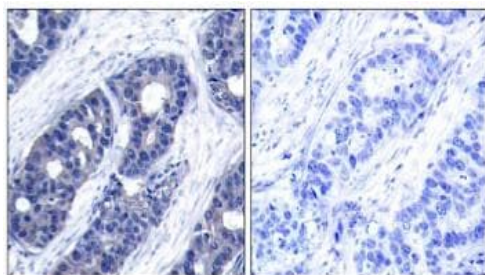
Anti-IRS1 antibody (ab131487) at 1/500 dilution + 293 cell extract

Predicted band size: 131 kDa



Immunocytochemistry/ Immunofluorescence - Anti-IRS1 antibody (ab131487)

Immunofluorescent analysis of methanol-fixed HeLa cells labelling IRS1 with ab131487 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS1 antibody (ab131487)

Immunohistochemical analysis of paraffin-embedded Human Breast carcinoma tissue labelling IRS1 with ab131487 at 1/50 dilution. The image on the right is treated with the synthesized peptide.

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

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