

Product datasheet

Anti-IRS2 antibody [EPR904(2)] α 134101

Recombinant RabMAb

[7 References](#) [10 Images](#)

Overview

Product name	Anti-IRS2 antibody [EPR904(2)]
Description	Rabbit monoclonal [EPR904(2)] to IRS2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human IRS2 aa 1300 to the C-terminus (C terminal). The exact sequence is proprietary.
Positive control	WB: HEK293, HEK293 (treated with insulin), and NIH/3T3 (treated with insulin) and SH-SY5Y cell lysates. IHC-P: Human kidney, breast and muscle tissues and rat kidney tissue. ICC/IF: SH-SY5Y cells. Flow Cyt: HeLa cells.
General notes	<p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>This product is a recombinant rabbit monoclonal antibody.</p>

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. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR904(2)
Isotype IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab134101** 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		1/1000 - 1/10000. Predicted molecular weight: 137 kDa.
IHC-P		1/50 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt		1/100 - 1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/300.

Target

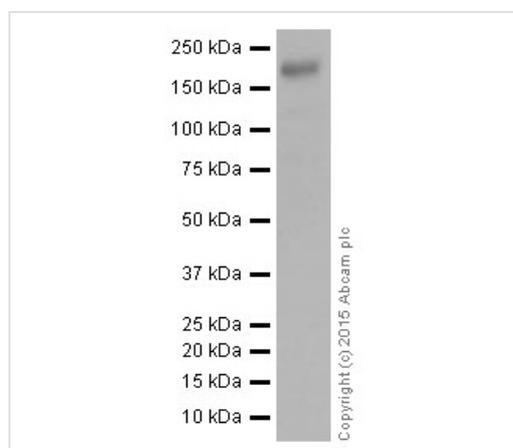
Function May mediate the control of various cellular processes by insulin.

Sequence similarities Contains 1 IRS-type PTB domain.
Contains 1 PH domain.

Post-translational modifications Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization Cytoplasm > cytosol.

Images



Western blot - Anti-IRS2 antibody [EPR904(2)]
(ab134101)

Anti-IRS2 antibody [EPR904(2)] (ab134101) at 1/5000 dilution
(purified) + NIH/3T3 whole cell lysate - treated with insulin at 20 µg

Secondary

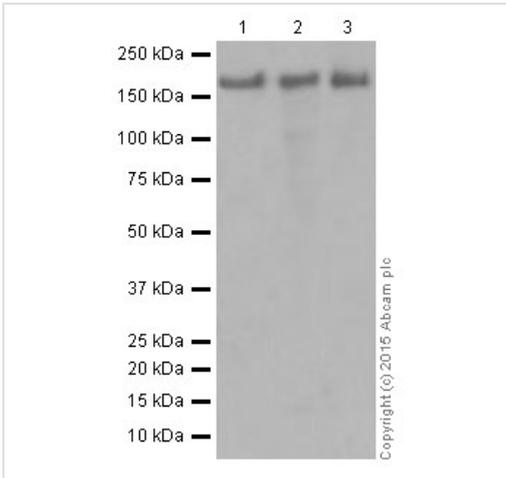
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/50000 dilution

Predicted band size: 137 kDa

Observed band size: 170-185 kDa

[why is the actual band size different from the predicted?](#)

Blocking and dilution buffer: 5% NFD/MTBST.



Western blot - Anti-IRS2 antibody [EPR904(2)] (ab134101)

All lanes : Anti-IRS2 antibody [EPR904(2)] (ab134101) at 20 µg (purified)

Lane 1 : HEK293 whole cell lysate - untreated

Lane 2 : HEK293 whole cell lysate - treated with insulin

Lane 3 : SH-SY5Y whole cell lysate

Lysates/proteins at 20 µg per lane.

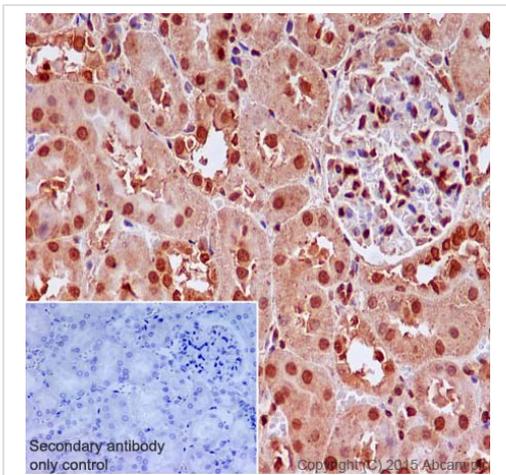
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 137 kDa

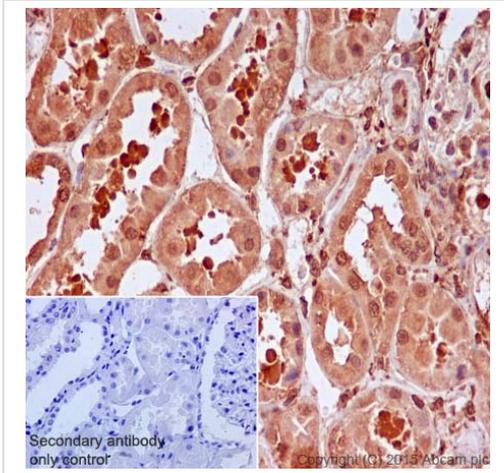
Observed band size: 170-185 kDa [why is the actual band size different from the predicted?](#)

Blocking and dilution buffer: 5% NFDM/TBST.



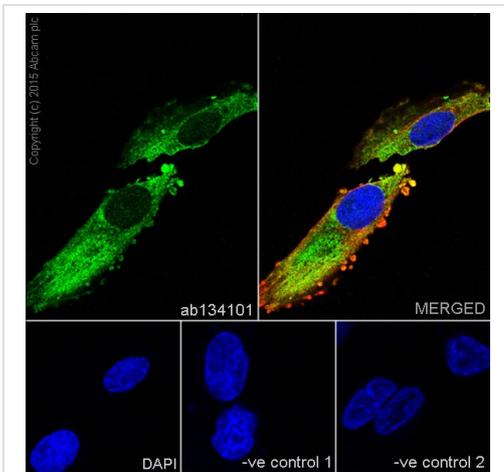
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS2 antibody [EPR904(2)] (ab134101)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue labelling IRS2 with purified ab134101 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS2 antibody [EPR904(2)] (ab134101)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling IRS2 with purified ab134101 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

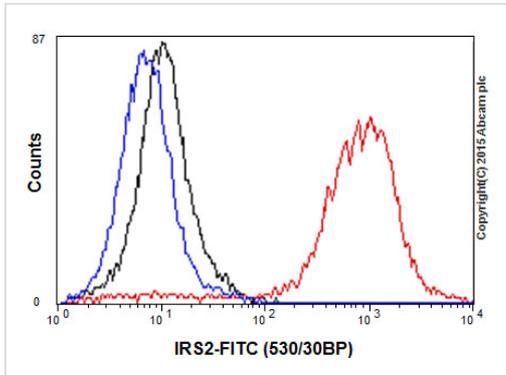


Immunocytochemistry/ Immunofluorescence - Anti-IRS2 antibody [EPR904(2)] (ab134101)

Immunocytochemistry/Immunofluorescence analysis of SH-SY5Y cells labelling IRS2 with purified ab134101 at 1/300. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. [ab150077](#), an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. [ab7291](#), a mouse anti-tubulin (1/1000) and [ab150120](#), an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/1000) were also used.

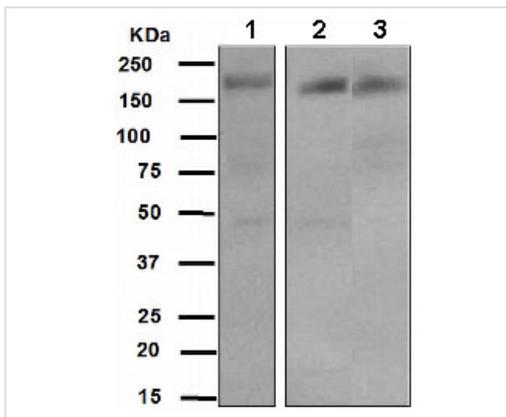
Control 1: primary antibody (1/300) and secondary antibody, [ab150120](#), an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: [ab7291](#) (1/1000) and secondary antibody, [ab150077](#), an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/1000).



Flow Cytometry - Anti-IRS2 antibody [EPR904(2)]
(ab134101)

Flow Cytometry analysis of HeLa cells labelling IRS2 with purified ab134101 at 1/120 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Western blot - Anti-IRS2 antibody [EPR904(2)]
(ab134101)

All lanes : Anti-IRS2 antibody [EPR904(2)] (ab134101) at 1/1000 dilution (unpurified)

Lane 1 : 293T cell lysate

Lane 2 : 293T + insulin cell lysate

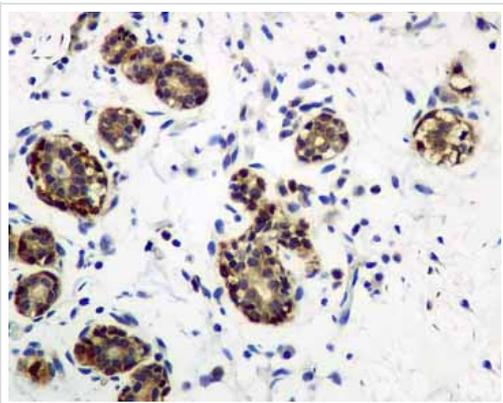
Lane 3 : SH-SY5Y cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

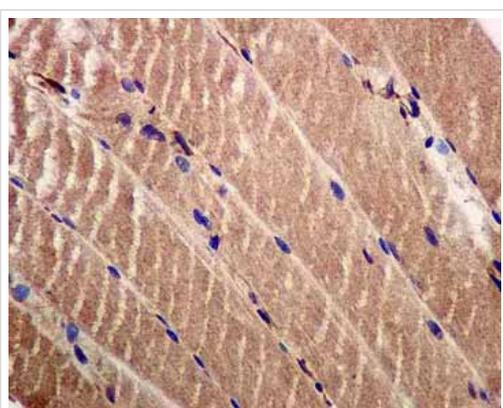
All lanes : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 137 kDa



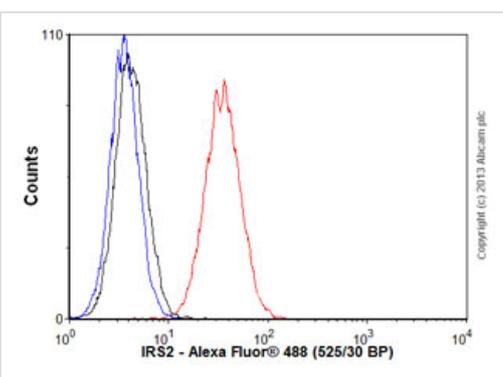
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS2 antibody [EPR904(2)] (ab134101)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast tissue labelling IRS2 with unpurified ab134101 at a dilution of 1/50.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IRS2 antibody [EPR904(2)] (ab134101)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human muscle tissue labelling IRS2 with unpurified ab134101 at a dilution of 1/50.



Flow Cytometry - Anti-IRS2 antibody [EPR904(2)] (ab134101)

Overlay histogram showing HeLa cells stained with unpurified ab134101 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (unpurified ab134101, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor[®] 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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