abcam

Product datasheet

Anti-Insulin Receptor alpha antibody ab203037

2 References 6 Images

Overview

Product name	Anti-Insulin Receptor alpha antibody
Description	Rabbit polyclonal to Insulin Receptor alpha
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P
Species reactivity	**Reacts with:** Rat, Human **Predicted to work with:** Mouse
Immunogen	Synthetic peptide within Human Insulin Receptor alpha aa 700-800 conjugated to keyhole limpet haemocyanin. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. Database link: **P06213** Run BLAST with Run BLAST with
Positive control	IHC-P: Rat tongue, brain, lung and small intestine tissue; WB: Human MCF-7, Jurkat, SW480 ad LOVO cell lysates; Flow Cyt (Intra): HL-60 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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X

Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab203037 in the following tested applications.

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

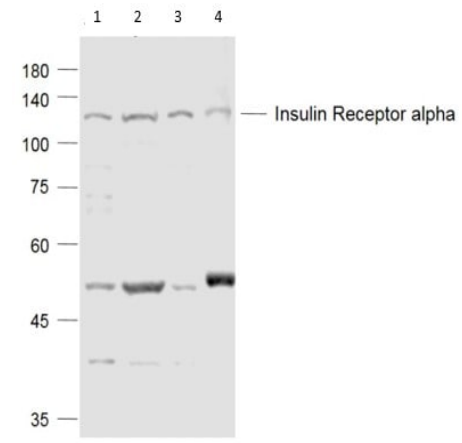
Application	Abreviews	Notes
Flow Cyt (Intra)		1/100.
WB		1/300 - 1/1000. Predicted molecular weight: 156 kDa.
IHC-P		1/50 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Relevance The human insulin receptor is a heterotetrameric membrane glycoprotein consisting of disulfide linked subunits in a beta-alpha-alpha-beta configuration. The beta subunit (95 kDa) possesses a single transmembrane domain, whereas the alpha subunit (135 kDa) is completely extracellular. The insulin receptor exhibits receptor tyrosine kinase (RTK) activity. RTKs are single pass transmembrane receptors that possess intrinsic cytoplasmic enzymatic activity, catalyzing the transfer of the gamma phosphate of ATP to tyrosine residues in protein substrates. RTKs are essential components of signal transduction pathways that affect cell proliferation, differentiation, migration and metabolism. Included in this large protein family are the insulin receptor and the receptors for growth factors such as epidermal growth factor, fibroblast growth factor and vascular endothelial growth factor. Receptor activation occurs through ligand binding, which facilitates receptor dimerization and autophosphorylation of specific tyrosine residues in the cytoplasmic portion. The interaction of insulin with the alpha subunit of the insulin receptor activates the protein tyrosine kinase of the beta subunit, which then undergoes an autophosphorylation that increases its tyrosine kinase activity. Three adapter proteins, IRS1, IRS2 and Shc, become phosphorylated on tyrosine residues following insulin receptor activation. These three phosphorylated proteins then interact with SH2 domain containing signaling proteins.

Cellular localization Membrane; single pass type I membrane protein.

Images



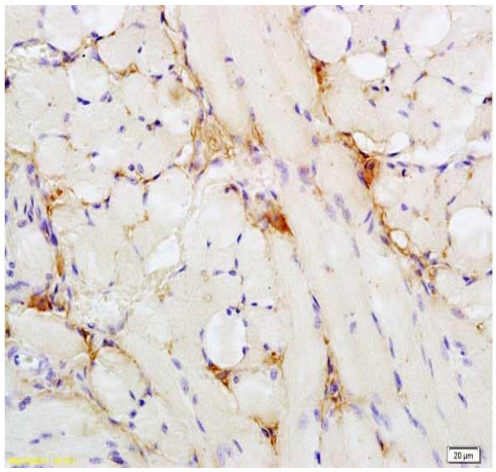
Western blot - Anti-Insulin Receptor alpha antibody (ab203037)

All lanes : Anti-Insulin Receptor alpha antibody (ab203037) at 1/500 dilution

Lane 1 : Human MCF-7 cell lysate
Lane 2 : Human Jurkat cell lysate
Lane 3 : Human SW480 cell lysate
Lane 4 : Human LOVO cell lysate

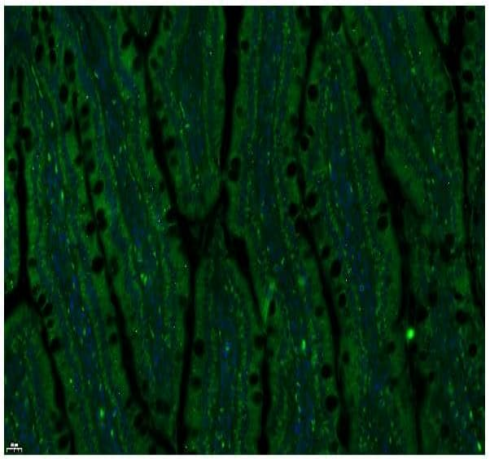
Secondary
All lanes : Conjugated secondary antibody for 60 minutes at 37C at 1/20000 dilution

Predicted band size: 156 kDa



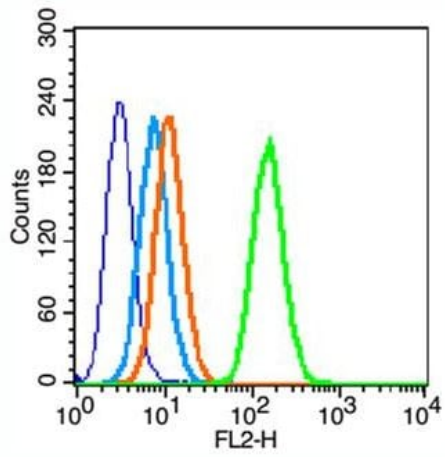
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin Receptor antibody (ab203037)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat tongue tissue labeling Insulin Receptor with ab203037 at 1/200 dilution, followed by secondary antibody detection and DAB staining.



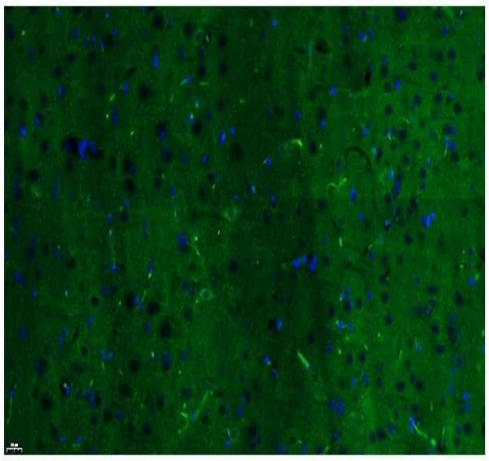
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin Receptor alpha antibody (ab203037)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat small intestine tissue labeling Insulin Receptor alpha with ab203037 at 1/200 dilution, followed by conjugated Goat Anti-Rabbit IgG secondary antibody. DAPI was used as nuclear counterstain. Heat mediated antigen retrieval with sodium citrate buffer, pH 6 was performed for 15 minutes.



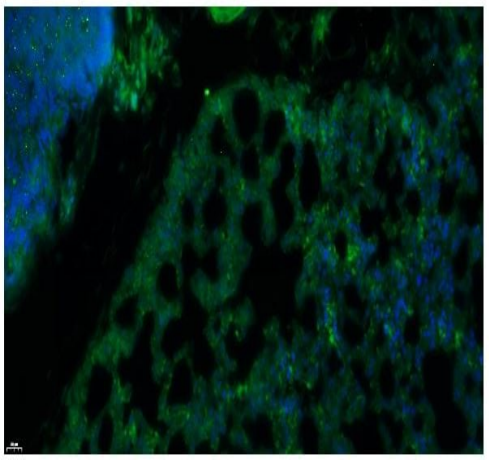
Flow Cytometry (Intracellular) - Anti-Insulin Receptor alpha antibody (ab203037)

Intracellular flow cytometric analysis of HL-60 cells labelleing insulin receptor alpha with ab203037 at 1/100 dilution (green), compared to control cells (blue) and isotype control (orange).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin Receptor alpha antibody (ab203037)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat small brain tissue labeling Insulin Receptor alpha with ab203037 at 1/200 dilution, followed by conjugated Goat Anti-Rabbit IgG secondary antibody. DAPI was used as nuclear counterstain. Heat mediated antigen retrieval with sodium citrate buffer, pH 6 was performed for 15 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin Receptor alpha antibody (ab203037)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded rat lung tissue labeling Insulin Receptor alpha with ab203037 at 1/200 dilution, followed by conjugated Goat Anti-Rabbit IgG secondary antibody. DAPI was used as nuclear counterstain. Heat mediated antigen retrieval with sodium citrate buffer, pH 6 was performed for 15 minutes.

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