

# Anti-Insulin Receptor alpha antibody [83-7] ab36550

**12 References**   **画像数 2**

### 製品の概要

製品名	Anti-Insulin Receptor alpha antibody [83-7]
製品の詳細	Mouse monoclonal [83-7] to Insulin Receptor alpha
由来種	Mouse
特異性	Does not cross react with the Human Type 1 IGF Receptor.
アプリケーション	<b>適用あり:</b> Flow Cyt, IHC-P
種交差性	<b>交差種:</b> Human <b>非交差種:</b> Rat
免疫原	Tissue, cells or virus corresponding to Human Insulin Receptor alpha.
エピトープ	ab36550 recognizes an epitope within amino acids 140-301 (the cysteine rich region) of the extracellular domain of the human Insulin Receptor alpha.
特記事項	<p>The antibody enhances the binding of <math>^{125}\text{I}</math> insulin binding to the insulin receptor of HIR3.5/3T3 cells and stimulates insulin mediated <math>^3\text{H}</math> thymidine incorporation in these cells.</p> <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&amp;As</p>

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	Constituent: PBS
精製度	Protein G purified
一次抗体 備考	The antibody enhances the binding of $^{125}\text{I}$ insulin binding to the insulin receptor of HIR3.5/3T3 cells and stimulates insulin mediated $^3\text{H}$ thymidine incorporation in these cells.

ポリ/モノ	モノクローナル
クローン名	83-7
アイソタイプ	IgG1

## アプリケーション

**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab36550の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells. (paraformaldehyde or methanol fixed cells)  ab170480 Mouse monoclonal IgG1 is suitable for use as an
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

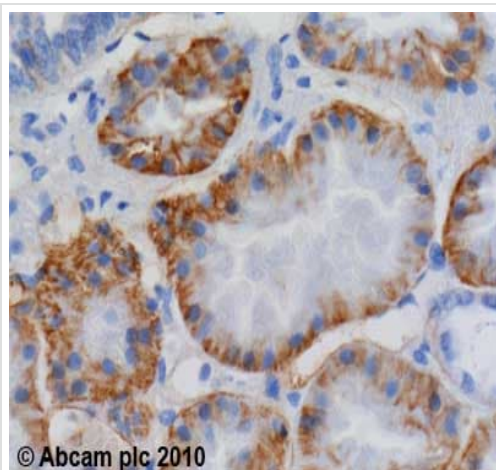
## ターゲット情報

**関連性**

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.

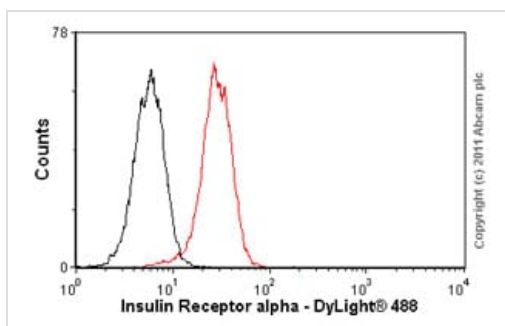
**細胞内局在** Membrane; single pass type I membrane protein.

## 画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Insulin Receptor alpha antibody [83-7] (ab36550)

ab36550 (1 µg/ml) staining insulin receptor alpha in human pancreas using an automated system (DAKO Autostainer Plus). Using this protocol there is strong staining of cytoplasm and basal cell membrane of proximal convoluted tubule cells. Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer citrate pH 6.0 in a DAKO PT link. Slides were peroxidase blocked in 3% H<sub>2</sub>O<sub>2</sub> in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.



Flow Cytometry - Anti-Insulin Receptor alpha antibody [83-7] (ab36550)

Overlay histogram showing Jurkat cells stained with ab36550 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab36550, 1 µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2 µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with methanol (5 min) used under the same conditions.

Please note that Abcam do not have data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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