

Anti-IGF1 Receptor/IGF1R Antibody

Catalog Number: PA1746

About IGF1R

IGF1R (Insulin-like Growth Factor 1 (IGF-1) Receptor) is a protein found on the surface of human cells. It is a transmembrane receptor that is activated by a hormone called Insulin-like growth factor 1 (IGF-1) and by a related hormone called IGF-2. It belongs to the large class of tyrosine kinase receptors. The IGF1R gene is mapped on 15q26.3. IGF-1 plays an important role in growth and continues to have anabolic effects in adults - meaning that it can induce hypertrophy of skeletal muscle and other target tissues. Using a yeast 2-hybrid system, Dey et al. (1998) identified a regulatory subunit of phosphatidylinositol (PI) 3-kinase, PIK3R3, as a binding partner of IGF1R. Functional interaction between BRCA1 and SP1 in the regulation of the IGF1R gene was studied in Schneider cells, a Drosophila cell line which lacks endogenous SP1. In these cells, BRCA1 suppressed 45% of the SP1-induced trans-activation of the IGF1R promoter. Overexpression of the Grb10-binding fragment of Ggfy1 resulted in a significant increase in Igf1-stimulated Igf1r tyrosine phosphorylation. Like the insulin receptor, the IGF-1 receptor is a receptor tyrosine kinase - meaning it signals by causing the addition of a phosphate molecule on particular tyrosines. IGF-1 activates the Insulin receptor at approximately 0.1x the potency of insulin. Part of this signaling may be via IGF1R-InsulinReceptor heterodimers.

Overview

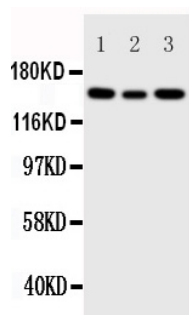
Product Name	Anti-IGF1 Receptor/IGF1R Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-IGF1 Receptor /IGF1R Antibody catalog # PA1746. Tested in IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P08069

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human IGF1 Receptor, different from the related rat and mouse sequences by one amino acid.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.

Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse, By Heat</p> <p>Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human</p>

Anti-IGF1 Receptor/IGF1R Antibody (PA1746) Images

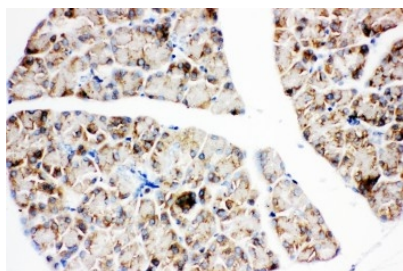


Anti-IGF1 Receptor antibody, PA1746, Western blotting

Lane 1: 293T Cell Lysate

Lane 2: A549 Cell Lysate

Lane 3: MCF-7 Cell Lysate



Anti-IGF1 Receptor antibody, PA1746, IHC(P)

IHC(P): Rat Pancreas Tissue

11 Publications Citing This Product

1. PubMed ID: PMID:28386316, Energy intake correlates with the levels of fatty acid synthase and insulin-like growth factor-1 in male and female C57BL/6 mice

2. PubMed ID: 29650947, Liu GX, Ma S, Li Y, Yu Y, Zhou YX, Lu YD, Jin L, Wang ZL, Yu JH. Exp Mol Med. 2018 Apr 13;50(4):25. doi: 10.1038/s12276-018-0048-7. Hsa-let-7c controls the committed differentiation of IGF-1-treated mesenchymal stem cells derived from dental pulps...

3. PubMed ID: 19424673, Treating Human Meniscal Fibrochondrocytes with hIGF-1 Gene by Liposome

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