

## Basic Information

<b>Product Name</b>	Anti-IGF1R Antibody	
<b>Gene Name</b>	IGF1R	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	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.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	110, 200 kDa	
<b>Dilution Ratios</b>	Western blot (WB): Immunohistochemistry (IHC): (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	1:500-2000 1:50-400

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

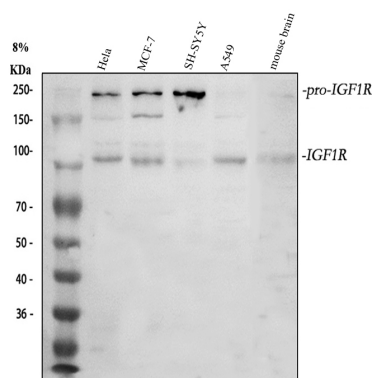
IGF1R(Insulin-like Growth Factor 1(IGF-1) Receptor) is a protein found on the surface of human cells. It is a transmembrane receptor that is activated by a hormone called Insulin-like growth factor 1(IGF-1) and by a related hormone called IGF-2. It belongs to the large class of tyrosine kinase receptors. 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 Gifyf1 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.

## Reference

Anti-IGF1R Antibody被引用在8文献中。

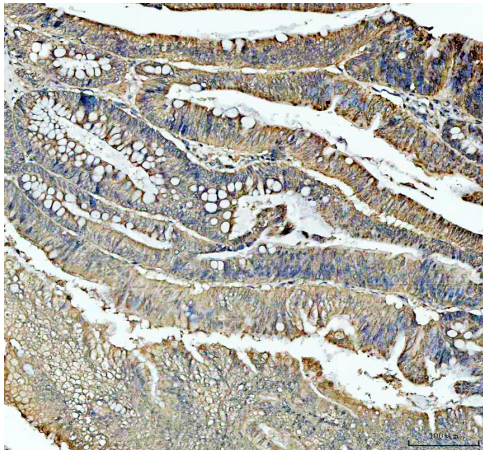
## Selected Validation Data



Western blot analysis of IGF1R using anti-IGF1R antibody (BA0498). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,  
Lane 2: human MCF-7 whole cell lysates,  
Lane 3: human SH-SY5Y whole cell lysates,  
Lane 4: human A549 whole cell lysates,  
Lane 5: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-IGF1R antigen affinity purified polyclonal antibody (BA0498) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for IGF1R at approximately 110, 200 kDa. The expected band size for IGF1R is at 155 kDa.



IHC analysis of IGF1R using anti-IGF1R antibody (BA0498).

IGF1R was detected in a paraffin-embedded section of human intestinal cancer tissue. The tissue section was incubated with rabbit anti-IGF1R Antibody (BA0498) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.