

Basic Information

Product Name	Anti-IGF1R Antibody	
Gene Name	Igf1r	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E. coli-derived mouse IGF1 Receptor recombinant protein (Position: E31-K257).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	155KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (ELISA): 1:100-1000 (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.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

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, it was 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.

Selected Validation Data

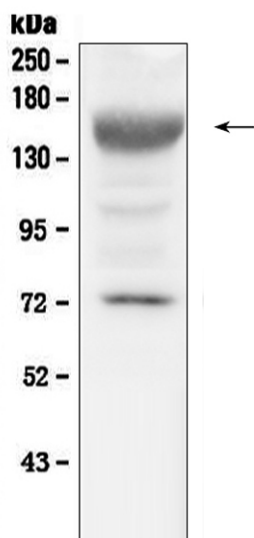


Figure 1. Western blot analysis of IGF1 Receptor using anti-IGF1 Receptor antibody (A00070). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse liver tissue lysates. probed with a goat anti-rabbit IgG-HRP secondary antibody . The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) A specific band was detected for IGF1 Receptor at approximately 155KD. The expected band size for IGF1 Receptor is at 155KD.

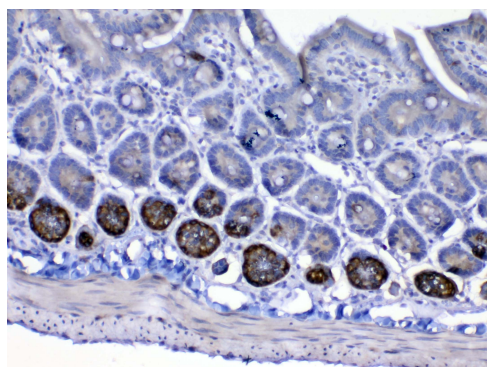


Figure 2. IHC analysis of IGF1 Receptor using anti-IGF1 Receptor antibody (A00070).IGF1 Receptor was detected in paraffin-embedded section of mouse small intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.