10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-IGF1 Receptor Picoband Antibody

Catalog # ABO12800

Specification

Anti-IGF1 Receptor Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Igf1r: Q60751
Host	**Rabbit**
Reactivity	**Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for IGF1 Receptor detection. Tested with WB, IHC-P, Direct ELISA in Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IGF1 Receptor Picoband Antibody - Additional Information

Application Details
Western blot, 0.1-0.5 µg/ml

 Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml

 Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization
Cell membrane ; Single-pass type I membrane protein .

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived mouse IGF1 Receptor recombinant protein (Position: E31-K257).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time. Avoid repeated freezing and thawing.**

Anti-IGF1 Receptor Picoband Antibody - Protein Information

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Anti-IGF1 Receptor Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-IGF1 Receptor Picoband Antibody - Images

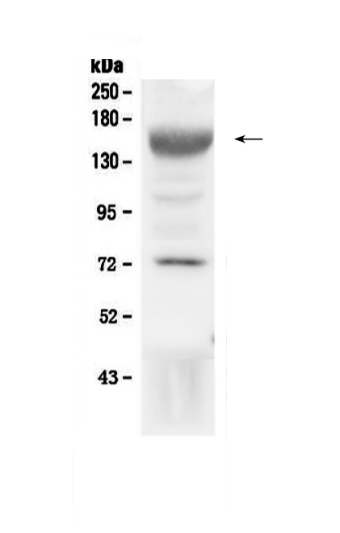

Figure 1. Western blot analysis of IGF1 Receptor using anti-IGF1 Receptor antibody (ABO12800). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IGF1 Receptor antigen affinity purified polyclonal antibody (Catalog # ABO12800) at 0.5 ug/mL overnight at 4℃, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IGF1 Receptor at approximately 155KD. The expected band size for IGF1 Receptor is at 155KD.

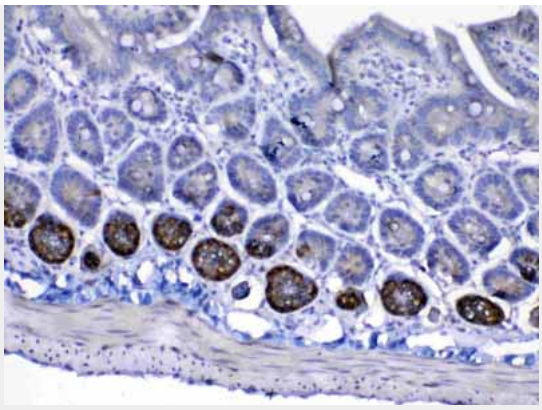

Figure 2. IHC analysis of IGF1 Receptor using anti-IGF1 Receptor antibody (ABO12800).IGF1 Receptor was detected in paraffin-embedded section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IGF1 Receptor Antibody (ABO12800) overnight at 4℃. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37℃. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

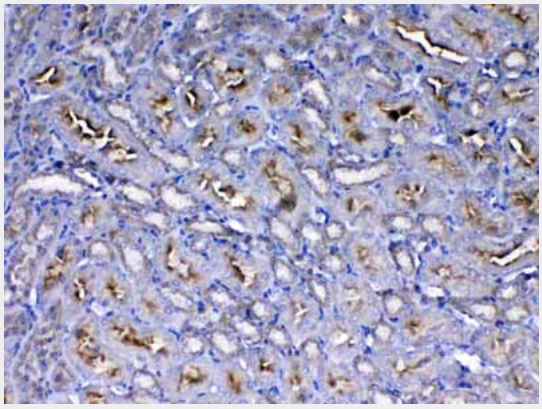

Figure 3. IHC analysis of IGF1 Receptor using anti-IGF1 Receptor antibody (ABO12800).IGF1 Receptor was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IGF1 Receptor Antibody (ABO12800) overnight at 4℃. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37℃. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-IGF1 Receptor Picoband Antibody - Background

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 Gigyf1 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.