

## Anti-Insulin-like growth factor I IGF1 Antibody Picoband®

Catalog Number: PA1374

### About IGF1

Insulin-like growth factor 1 (IGF-1) also known as somatomedin C or mechano growth factor is a protein that in humans is encoded by the IGF1 gene. IGF-1 is a hormone similar in molecular structure to insulin. It plays an important role in childhood growth and continues to have anabolic effects in adults. A synthetic analog of IGF-1, mecasermin is used for the treatment of growth failure. IGF-1 consists of 70 amino acids in a single chain with three intramolecular disulfide bridges. IGF-1 has a molecular weight of 7649 daltons. Justice et al. (1990) placed the mouse IGF1 gene on chromosome 10.

### Overview

Product Name	Anti-Insulin-like growth factor I IGF1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Insulin-like growth factor I IGF1 Antibody catalog # PA1374. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
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	P05019

### Technical Details

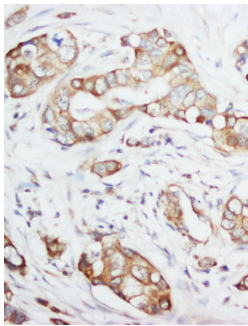
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human IGF-1, different from the mouse and rat sequences by one amino acid.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse Western blot, 0.1-0.5ug/ml, Human

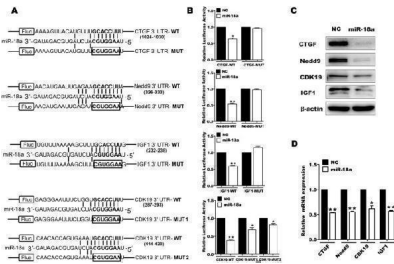
## Anti-Insulin-like growth factor I IGF1 Antibody Picoband® (PA1374) Images



Anti-IGF-1 antibody, PA1374, Western blottingWB:  
Recombinant Human IGF-1 Protein 2.5ng

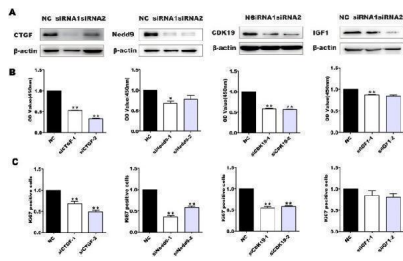


Anti-IGF-1 antibody, PA1374, IHC(P)IHC(P): Human Mammary  
Cancer Tissue



Analysis of the target genes of miR-18a in pancreatic progenitor cells. Schematic of the base pairing of miR-18a and its predicted target sequences on the 3'UTR of CTGF, Nedd9, IGF1, and CDK19 ( A ). miR-18a or NC, pMIR-target 3'UTR-luciferase or pMIR-target 3'UTR mut-luciferase, and Renilla pRL-SV40 vectors were co-transfected into 3T3 cells. Forty-eight hours later, Luciferase activity was determined using a Dual-Luciferase Reporter Assay System Kit. All Firefly luciferase values were normalized to the co-transfected Renilla luciferase values ( B ). Pancreatic progenitor cells were transfected with miR-18a or NC. Seventy-two hours after transfection, western blots were performed to determine the expression of CTGF, Nedd9, CDK19, and IGF1. beta-actin was used as an endogenous control ( C ). Pancreatic progenitor cells were transfected with miR-18a or NC. Forty-eight hours after transfection, real-time quantitative RT-PCR was performed to determine the expression of CTGF, Nedd9, CDK19, and IGF1 mRNA ( D ). The data from the miRNA transfected groups were normalized to that of control group. \* P

Effect of miR-18a target gene knock-down on the proliferation of pancreatic progenitor cells. Pancreatic progenitor cells were transfected with siCTGF-1/2, siNedd9-1/2, siCDK19-1/2, and siIGF1-1/2 or sicontrol (NC) for 72 h, and the knockdown of these genes was confirmed by western blot assay ( A ). The proliferation of pancreatic progenitor cells that knocked down the target genes were evaluated by CCK8 assay ( B ) and Ki67 immunofluorescent staining ( C ). The Ki67-positive cells were divided by DAPI-



positive cells. The data from the siRNA transfected groups were normalized to that of control group. \* P

## 10 Publications Citing This Product

1. PubMed ID: 33617969, Peng MF, Tian S, Song YG, Li CX, Miao MS, Zhen-Ren, Li M. Effects of total flavonoids from *Eucommia ulmoides* Oliv. leaves on polycystic ovary syndrome with insulin resistance model rats induced by letrozole combined with a high-fat diet. *J Ethnopharmacol.* 2021 Feb
2. PubMed ID: 27779666, Effects of the IGF-1/PTEN/Akt/FoxO signaling pathway on male reproduction in rats subjected to water immersion and restraint stress
3. PubMed ID: 27833113, Elucidating a molecular mechanism that the deterioration of porcine meat quality responds to increased cortisol based on transcriptome sequencing

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