

Anti-GDF15 Picoband Antibody

Catalog # ABO10195

Specification

Anti-GDF15 Picoband Antibody - Product Information

Application WB
Primary Accession Q99988
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

Description

Rabbit IgG polyclonal antibody for Growth/differentiation factor 15(GDF15) detection. Tested with WB in Human.

Reconstitution

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

Anti-GDF15 Picoband Antibody - Additional Information

Gene ID 9518

Other Names

Growth/differentiation factor 15, GDF-15, Macrophage inhibitory cytokine 1, MIC-1, NSAID-activated gene 1 protein, NAG-1, NSAID-regulated gene 1 protein, NRG-1, Placental TGF-beta, Placental bone morphogenetic protein, Prostate differentiation factor, GDF15, MIC1, PDF, PLAB, PTGFB

Calculated MW

34140 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Secreted.

Tissue Specificity

Highly expressed in placenta, with lower levels in prostate and colon and some expression in kidney.

Protein Name

Growth/differentiation factor 15

Contents

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

Immunogen

E.coli-derived human GDF15 recombinant protein (Position: A195-I308). Human GDF15 shares



68.1% and 69.2% amino acid (aa) sequence identity with mouse and rat GDF15, respectively.

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-GDF15 Picoband Antibody - Protein Information

Name GDF15 (<u>HGNC:30142</u>)

Function

Regulates food intake, energy expenditure and body weight in response to metabolic and toxin-induced stresses (PubMed:28953886, PubMed:28846097, PubMed:28846098, PubMed:28846099, PubMed:23468844, PubMed:29046435). Binds to its receptor, GFRAL, and activates GFRAL- expressing neurons localized in the area postrema and nucleus tractus solitarius of the brainstem (PubMed: 28953886, PubMed:28846097, PubMed:28846098, PubMed:28846099). It then triggers the activation of neurons localized within the parabrachial nucleus and central amygdala, which constitutes part of the 'emergency circuit' that shapes feeding responses to stressful conditions (PubMed:28953886). On hepatocytes, inhibits growth hormone signaling (By similarity).

Cellular Location

Secreted

Tissue Location

Highly expressed in placenta, with lower levels in prostate and colon and some expression in kidney (PubMed:9348093) Detected in plasma (at protein level) (PubMed:28572090, PubMed:29046435).

Anti-GDF15 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-GDF15 Picoband Antibody - Images

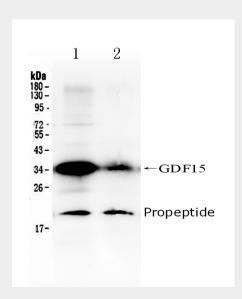


Figure 1. Western blot analysis of GDF15 using anti- GDF15 antibody (ABO10195). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: 22RV whole Cell lysates, Lane 2: human placenta 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- GDF15 antigen affinity purified polyclonal antibody (Catalog # ABO10195) at 0.5 $1\frac{1}{4}$ g/mL overnight at $4\text{Å}^{\circ}\text{C}$, 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 GDF15 at approximately 34KD. The expected band size for GDF15 is at 34KD.

Anti-GDF15 Picoband Antibody - Background

Growth/differentiation factor 15 (GDF15) is a protein belonging to the transforming growth factor beta superfamily that has a role in regulating inflammatory and apoptotic pathways in injured tissues and during disease processes. GDF15 is also known as TGF-PL, MIC-1, PDF, PLAB, and PTGFB. GDF15 mRNA is most abundant in the liver, with lower levels seen in some other tissues. Its expression in liver can be significantly up-regulated in during injury of organs such as liver, kidney, heart and lung.