

# Anti-FGF21 Antibody

Catalog # ABO10987

#### Specification

# Anti-FGF21 Antibody - Product Information

ApplicationWBPrimary AccessionO9NSA1HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Fibroblast growth factor 21(FGF21) detection. Tested with WB in Human.

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

#### Anti-FGF21 Antibody - Additional Information

Gene ID 26291

**Other Names** Fibroblast growth factor 21, FGF-21, FGF21

Calculated MW 22300 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

Subcellular Localization Secreted .

**Protein Name** Fibroblast growth factor 21(FGF-21)

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

**Immunogen** A synthetic peptide corresponding to a sequence at the N-terminus of human FGF21(43-58aa QVRQRYLYTDDAQQTE), different from the related rat and mouse sequences by two amino acids.

**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.

Sequence Similarities Belongs to the heparin-binding growth factors family.

#### Anti-FGF21 Antibody - Protein Information

Name FGF21

Function

Stimulates glucose uptake in differentiated adipocytes via the induction of glucose transporter SLC2A1/GLUT1 expression (but not SLC2A4/GLUT4 expression). Activity requires the presence of KLB. Regulates systemic glucose homeostasis and insulin sensitivity.

Cellular Location Secreted {ECO:0000250|UniProtKB:Q9JJN1}.

# Anti-FGF21 Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-FGF21 Antibody - Images



Anti-FGF21 antibody, ABO10987, Western blottingAll lanes: Anti FGF21 (ABO10987) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: A431 Whole Cell Lysate at 40ugLane 3:



HEPA Whole Cell Lysate at 40ugPredicted bind size: 21KDObserved bind size: 21KD

### Anti-FGF21 Antibody - Background

FGF21(Fibroblast growth factor 21) is a protein that in humans is encoded by the FGF21 gene, which is also a member of the fibroblast growth factor(FGF) family. The FGF21 gene is mapped on 19q13.33. Using RT-PCR, Fgf21 was expressed in several types of adipose tissue in mice, including subcutaneous and epididymal fat pads and brown adipose tissue. The level of Fgf21 expression in adipose tissue was comparable to that in liver. FGF21 stimulates glucose uptake in adipocytes but not in other cell types. This effect is additive to the activity of insulin. FGF21 treatment of adipocytes is associated with phosphorylation of FRS2, a protein linking FGF receptors to the Ras/MAP kinase pathway. FGF21 also protects animals from diet-induced obesity when overexpressed in transgenic mice and lowers blood glucose and triglyceride levels when administered to diabetic rodents. Changes in Fgf21 expression due to suckling or nutritional manipulations were associated with changes in circulating free fatty acid and ketone body levels. In differentiated mouse brown adipocytes in culture, Fgf21 treatment increased the expression of thermogenic genes, caused higher total and uncoupled respiration, and enhanced glucose oxidation.