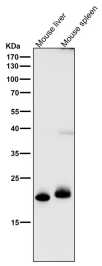
FGF21 Antibody [clone AG-6] (RQ4485)

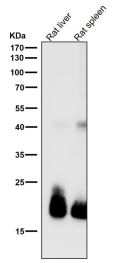
Catalog No.	Formulation	Size
RQ4485	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

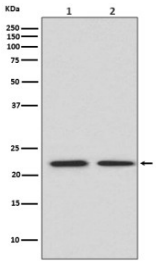
Availability	1-2 weeks
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AG-6
Purity	Protein A affinity
UniProt	Q9NSA1
Localization	Secreted
Applications	Western Blot : 1:500-1:2000
Limitations	This FGF21 antibody is available for research use only.



FGF21 Antibody Mouse Liver and Spleen WB. Western blot analysis of mouse liver and mouse spleen tissue lysates using FGF21 Antibody clone AG-6 demonstrates prominent bands at approximately 19-21 kDa, consistent with the expected molecular weight range of Fibroblast growth factor 21 / FGF21, a secreted endocrine metabolic hormone involved in glucose regulation, lipid metabolism, and adaptive energy homeostasis. A weaker higher molecular weight band is also observed in mouse spleen lysate, which may reflect higher-order or post-translationally modified FGF21-associated species. All lanes were tested using FGF21 Antibody clone AG-6 at 1:1000 dilution for 1 hour at room temperature.



FGF21 Antibody Rat Liver and Spleen WB. Western blot analysis of rat liver and rat spleen tissue lysates using FGF21 Antibody clone AG-6 demonstrates prominent bands at approximately 19-21 kDa, consistent with the expected molecular weight range of Fibroblast growth factor 21 / FGF21, a secreted endocrine signaling protein involved in glucose metabolism, lipid utilization, and adaptive energy homeostasis. Additional weaker higher molecular weight bands are observed near approximately 40 kDa, potentially representing higher-order or post-translationally modified FGF21-associated species. All lanes were tested using FGF21 Antibody clone AG-6 at 1:1000 dilution for 1 hour at room temperature.



Western blot testing of 1) human HeLa and 2) mouse spleen lysate with FGF21 antibody at 0.5ug/ml. Predicted molecular weight ~21 kDa.

Description

Fibroblast growth factor 21 (FGF21) is a secreted endocrine signaling protein involved in regulation of glucose metabolism, lipid utilization, insulin sensitivity, and systemic energy homeostasis. The FGF21 Antibody / Cross-Species Metabolic Research Antibody is designed for detection of FGF21 expression across human, mouse, and rat research models commonly used in metabolic biology, obesity-associated signaling, endocrine regulation, and hepatokine-associated pathway studies.

FGF21 is encoded by the FGF21 gene on chromosome 19q13 and belongs to the endocrine subgroup of fibroblast growth factors. Unlike classical paracrine fibroblast growth factors, FGF21 functions as a circulating hormone-like signaling molecule capable of coordinating adaptive metabolic responses across multiple organ systems. Hepatic tissue serves as a major source of FGF21 production, although expression may also occur within adipose tissue, pancreas, skeletal muscle, and additional metabolically active cellular compartments.

FGF21 signaling is strongly associated with fasting adaptation, ketogenesis, nutrient sensing, mitochondrial stress responses, and lipid oxidation pathways. Increased FGF21 expression has been reported during metabolic stress states including starvation, obesity-associated metabolic imbalance, insulin resistance, fatty liver disease, and endoplasmic reticulum stress. Through interactions with fibroblast growth factor receptors and the cofactor beta-Klotho, FGF21 regulates transcriptional programs involved in glucose utilization, fatty acid metabolism, and energy expenditure control.

Because metabolic signaling pathways are frequently investigated across multiple species systems, cross-species detection of FGF21 remains particularly valuable in translational metabolism research. Human, mouse, and rat experimental models are widely used to study obesity biology, diabetes-associated signaling, hepatic metabolism, endocrine adaptation, and systemic energy regulation. The recombinant antibody format supports consistent target recognition in studies involving metabolically active tissues including liver and immune-associated tissue compartments.

Western blot analysis using FGF21 antibodies commonly demonstrates bands corresponding to secreted FGF21 protein in hepatocyte-associated and metabolically active tissue lysates. Cross-species reactivity across human, mouse, and rat samples supports comparative metabolic pathway analysis and translational endocrine signaling studies. Immunohistochemical applications may demonstrate cytoplasmic staining patterns consistent with the secretory biology of FGF21 within epithelial and hepatocyte-associated cellular populations.

FGF21 continues to serve as an important target in studies involving obesity, type 2 diabetes, metabolic syndrome, fatty liver disease, endocrine adaptation, and nutrient-responsive signaling pathways. Ongoing interest in FGF21-directed

therapeutic strategies and metabolic biomarker development continues to drive broad research demand for high-quality antibodies compatible with translational metabolic research models.

For highly selective detection of FGF21 in endocrine signaling and metabolic pathway studies, see the FGF21 Antibody / Metabolic Signaling Hormone Antibody clone FGF21/4343 featuring protein microarray specificity validation.

Application Notes

Optimal dilution of the FGF21 antibody should be determined by the researcher.

Immunogen

A synthetic peptide from human FGF21 was used as the immunogen for the FGF21 antibody.

Storage

Store the FGF21 antibody at -20oC.

Alternate Names

FGF21 antibody, Fibroblast growth factor 21 antibody, Cross-species metabolic research antibody, Hepatokine antibody, Recombinant metabolic hormone antibody