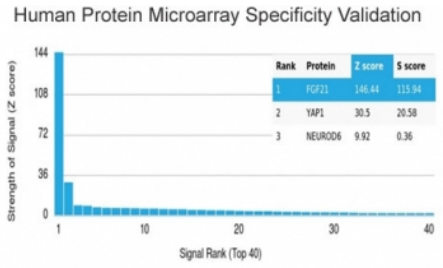
FGF21 Antibody / Metabolic Signaling Hormone Antibody [clone FGF21/4343] (V9462)

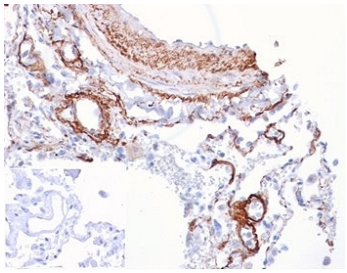
Catalog No.	Formulation	Size
V9462-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9462-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9462SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	FGF21/4343
Purity	Protein A/G affinity
UniProt	Q9NSA1
Localization	Secreted (extracellular)
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This FGF21 Antibody / Metabolic Signaling Hormone Antibody is available for research use only.



FGF21 Antibody Microarray Specificity Validation. Analysis of a HuProt(TM) human protein microarray containing more than 19,000 full-length human proteins using clone FGF21/4343 demonstrates highly selective binding to Fibroblast growth factor 21 / FGF21 with minimal off-target reactivity detected across the tested human proteome. The strong enrichment of FGF21 signal relative to lower-ranking proteins supports the specificity of this monoclonal antibody for studies involving metabolic signaling, endocrine regulation, hepatokine biology, and adaptive energy homeostasis pathways. Z- and S-score interpretation: The Z-score represents the signal intensity generated when an antibody, together with a fluorescently labeled secondary antibody, binds to a specific protein target on the HuProt(TM) array. Z-scores are expressed as standard deviations above the mean signal intensity of all proteins present on the array. Proteins are ranked according to descending Z-score values, and the S-score represents the difference in Z-score between sequentially ranked proteins. The S-score therefore reflects the relative specificity of an antibody for its intended target compared to other proteins represented on the array.



FGF21 Antibody Human Lung IHC. Immunohistochemistry analysis of FFPE human lung tissue stained with FGF21 Antibody / Metabolic Signaling Hormone Antibody clone FGF21/4343 demonstrates distinct cytoplasmic and membranous HRP-DAB brown staining within epithelial cell populations lining bronchial and alveolar-associated structures, consistent with the role of Fibroblast growth factor 21 / FGF21 in metabolic adaptation, endocrine signaling, and tissue-associated energy homeostasis pathways. The negative control inset using PBS in place of primary antibody demonstrates minimal background secondary antibody binding. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

Fibroblast growth factor 21 (FGF21) is a secreted endocrine signaling protein involved in regulation of glucose metabolism, lipid utilization, energy expenditure, and adaptive metabolic homeostasis. The FGF21 Antibody / Metabolic Signaling Hormone Antibody clone FGF21/4343 is designed for highly selective detection of FGF21 expression in studies involving metabolic signaling, hepatokine biology, endocrine regulation, and energy balance-associated pathways.

FGF21 is encoded by the FGF21 gene on chromosome 19q13 and belongs to the endocrine subgroup of fibroblast growth factors. Unlike many canonical FGFs that primarily function through paracrine signaling, FGF21 circulates systemically as a hormone-like metabolic regulator. The protein is produced predominantly by hepatocytes but is also expressed in adipose tissue, pancreas, skeletal muscle, and additional metabolically active tissues under specific physiologic conditions.

FGF21 signaling is closely associated with fasting adaptation, ketogenesis, lipid oxidation, and insulin sensitivity. Expression of FGF21 may increase during metabolic stress states including starvation, mitochondrial dysfunction, obesity-associated metabolic imbalance, and endoplasmic reticulum stress. Through interactions with fibroblast growth factor receptors and the co-receptor beta-Klotho, FGF21 regulates transcriptional and metabolic programs involved in nutrient sensing and energy utilization.

The biologic importance of FGF21 has generated substantial interest across obesity research, diabetes biology, fatty liver disease studies, and metabolic syndrome-associated signaling pathways. Altered circulating FGF21 levels have been associated with insulin resistance, hepatic steatosis, cardiovascular disease, and adaptive metabolic stress responses. The protein has therefore emerged as both a metabolic biomarker candidate and a therapeutic target within endocrine and metabolic disease research.

The clone FGF21/4343 monoclonal antibody is further differentiated by protein microarray specificity validation performed against a HuProt(TM) array containing more than 19,000 full-length human proteins. This large-scale specificity screening

approach helps evaluate potential cross-reactivity across the human proteome and is particularly valuable for secreted growth factor targets that share conserved structural domains within larger cytokine and fibroblast growth factor families. The resulting specificity profile supports selective detection of FGF21 in studies where target specificity and reduced off-target recognition are important experimental considerations.

Immunohistochemical analysis using FGF21 antibodies commonly demonstrates cytoplasmic staining patterns within metabolically active epithelial and hepatocyte-associated tissue compartments, consistent with the role of FGF21 as a secreted endocrine metabolic regulator. FGF21 continues to serve as an important target in studies involving metabolic adaptation, endocrine signaling, nutrient sensing, obesity biology, and systemic energy homeostasis.

Additional antibodies involved in metabolic adaptation, endocrine signaling, hepatokine biology, and energy homeostasis can be explored within our Metabolism Antibodies collection.

Application Notes

Optimal dilution of the FGF21 Antibody / Metabolic Signaling Hormone Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 91-209 was used as the immunogen for the Fibroblast Growth Factor 21 antibody.

Storage

Aliquot the Fibroblast Growth Factor 21 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

FGF21 antibody, Fibroblast growth factor 21 antibody, Metabolic hormone antibody, Hepatokine antibody, Endocrine metabolism regulator antibody

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