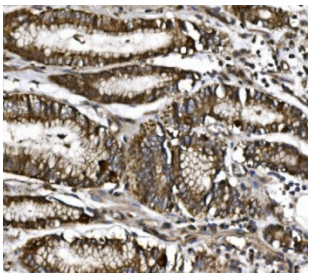
MitoNEET Antibody / CISD1 Antibody (RQ5710)

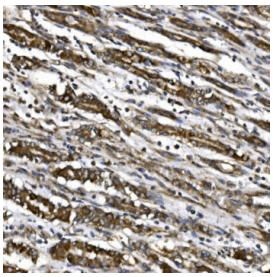
Catalog No.	Formulation	Size
RQ5710	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

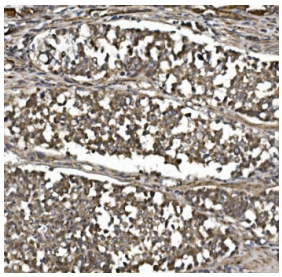
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q9NZ45
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry: 1-2ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This MitoNEET Antibody / CISD1 Antibody is available for research use only.



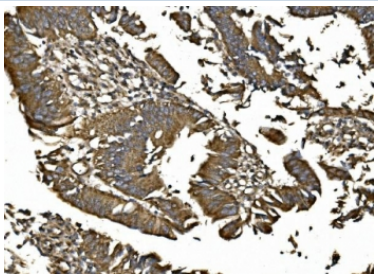
MitoNEET Antibody Human Gastric Cancer IHC. Immunohistochemical staining of FFPE human gastric cancer tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated MitoNEET expression using an HRP-conjugated detection system with DAB chromogen. Tumor cells exhibit moderate to strong predominantly cytoplasmic staining, consistent with the mitochondrial localization of CISD1. The staining pattern supports the use of MitoNEET Antibody, a CISD1 Antibody, for immunohistochemical detection of mitoNEET expression in human gastric cancer tissue.



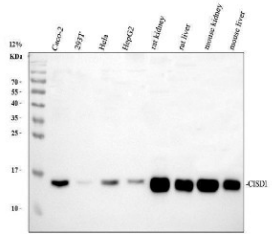
MitoNEET Antibody Human Gastric Cancer IHC. Immunohistochemical staining of FFPE human gastric cancer tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated MitoNEET expression using an HRP-conjugated detection system with DAB chromogen. Tumor cells exhibit predominantly cytoplasmic staining throughout the malignant gastric glands with moderate staining intensity, consistent with the mitochondrial localization of CISD1. The staining pattern supports the use of MitoNEET Antibody, a CISD1 Antibody, for immunohistochemical detection of mitoNEET expression in human gastric cancer tissue.



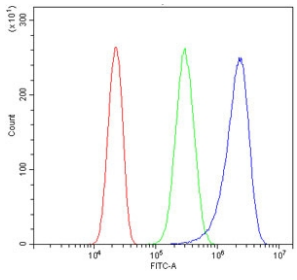
MitoNEET Antibody Human Gastric Cancer IHC. Immunohistochemical staining of FFPE human gastric cancer tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated MitoNEET expression using an HRP-conjugated detection system with DAB chromogen. The tumor cells show strong diffuse granular cytoplasmic staining, consistent with the expected mitochondrial localization of CISD1, while surrounding stromal elements exhibit comparatively weaker reactivity. The staining pattern supports the use of MitoNEET Antibody, a CISD1 Antibody, for immunohistochemical detection of mitoNEET expression in human gastric cancer tissue.



MitoNEET Antibody Human Rectal Cancer IHC. Immunohistochemical staining of FFPE human rectal cancer tissue following heat-induced epitope retrieval in pH8 EDTA buffer demonstrated MitoNEET expression using an HRP-conjugated detection system with DAB chromogen. The malignant glandular epithelium exhibits moderate to strong predominantly cytoplasmic staining with focal membranous accentuation, consistent with the expected mitochondrial localization of CISD1. The staining pattern supports the use of MitoNEET Antibody, a CISD1 Antibody, for immunohistochemical detection of mitoNEET expression in human rectal cancer tissue.



MitoNEET Antibody Human, Rat and Mouse WB. Western blot analysis detected MitoNEET (CISD1) in human CACO-2, HEK293T, HeLa, and HepG2 cell lysates (lanes 1-4), rat kidney and liver tissue lysates (lanes 5-6), and mouse kidney and liver tissue lysates (lanes 7-8). A predominant immunoreactive band is observed at approximately 15 kDa, which is consistent with the expected molecular weight range of 12-15 kDa for MitoNEET. MitoNEET Antibody, a CISD1 Antibody, demonstrates cross-reactive detection across human, rat, and mouse samples, supporting its use for Western blot analysis of mitoNEET expression in cultured cells and tissue lysates.



MitoNEET Antibody Human Prostate Cancer Cell FACS. Flow cytometric analysis of fixed human PC-3 prostate cancer cells demonstrated a clear rightward shift in fluorescence intensity for cells stained with MitoNEET antibody (blue) compared with the isotype control (green) and unstained cells (red), indicating specific detection of MitoNEET. These results support the use of MitoNEET Antibody, a CISD1 Antibody, for flow cytometric analysis of mitoNEET expression in cultured human prostate cancer cells.

Description

MitoNEET Antibody recognizes mitoNEET, also known as CDGSH iron sulfur domain-containing protein 1 (CISD1), a small iron-sulfur cluster protein localized to the outer mitochondrial membrane. MitoNEET belongs to the NEET protein family and contains a unique CDGSH domain that coordinates a two iron-two sulfur cluster essential for redox regulation and mitochondrial function. Initially identified as a target of the insulin-sensitizing drug pioglitazone, mitoNEET has since emerged as an important regulator of mitochondrial metabolism, oxidative stress, and iron homeostasis. Through its ability to transfer iron-sulfur clusters and influence mitochondrial bioenergetics, mitoNEET contributes to cellular adaptation during changing metabolic conditions. NSJ Bioreagents provides high-quality MitoNEET Antibody reagents for

researchers studying mitochondrial biology, metabolism, and redox signaling.

As a CISD1 Antibody target, mitoNEET plays a central role in maintaining mitochondrial integrity and coordinating communication between mitochondrial metabolism and cellular signaling pathways. The protein influences oxidative phosphorylation, reactive oxygen species production, lipid metabolism, and iron utilization while helping preserve mitochondrial structure under physiological and stress conditions. Altered mitoNEET activity has been associated with changes in glucose metabolism, adipocyte function, and cellular responses to nutrient availability. Because mitochondrial dysfunction contributes to numerous pathological processes, a MitoNEET Antibody is widely used to investigate mitochondrial quality control, metabolic regulation, and the mechanisms linking mitochondrial health to cellular homeostasis.

Growing evidence has implicated CISD1 in metabolic disease, cardiovascular disorders, neurodegenerative disease, aging, and cancer. Changes in mitoNEET expression or activity can influence insulin sensitivity, mitochondrial respiration, oxidative stress, and iron handling, making the protein an attractive target for studies of diabetes, obesity, and metabolic syndrome. In oncology, CISD1 has been investigated for its contribution to tumor cell metabolism, proliferation, and survival through regulation of mitochondrial function. More recently, mitoNEET has also been associated with ferroptosis, where its regulation of iron-sulfur cluster stability and mitochondrial iron metabolism may influence susceptibility to iron-dependent cell death. Consequently, the CISD1 Antibody is an important reagent for researchers investigating mitochondrial dysfunction, metabolic disease, redox biology, ferroptosis, and cancer progression.

A MitoNEET Antibody / CISD1 Antibody is commonly used to evaluate protein expression and mitochondrial localization in cultured cells and tissue specimens while supporting investigations of mitochondrial metabolism, oxidative stress, iron-sulfur cluster biology, and disease-associated metabolic remodeling. These studies continue to expand understanding of how mitochondrial function influences cellular physiology and pathological processes. NSJ Bioreagents provides carefully validated antibodies to support reliable and reproducible detection of mitoNEET across a broad range of experimental models. A MitoNEET Antibody / CISD1 Antibody is a valuable research reagent for investigating mitochondrial function, iron-sulfur cluster regulation, metabolic homeostasis, ferroptosis, and redox signaling.

Explore our Mitochondrial Antibodies page to discover validated antibodies for MitoNEET and other proteins involved in mitochondrial function, iron-sulfur cluster regulation, energy metabolism, oxidative stress, and cellular homeostasis.

Application Notes

Optimal dilution of the MitoNEET Antibody / CISD1 Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids Y28-E93) was used as the immunogen for the MitoNEET antibody.

Storage

After reconstitution, the MitoNEET antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

MitoNEET antibody, CISD1 antibody, CDGSH Iron Sulfur Domain Protein 1 antibody, CDGSH Iron Sulfur Domain-Containing Protein 1 antibody, Mitochondrial Outer Membrane Iron Sulfur Protein antibody, CDGSH1 antibody

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