10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-ISCU Antibody (aa3-148)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18269

Specification

Anti-ISCU Antibody (aa3-148) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	Q9H1K1
Predicted	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**17999**

Anti-ISCU Antibody (aa3-148) - Additional Information

Gene ID 23479

Alias Symbol	**ISCU**

Other Names
ISCU, ISU2, NifU-like protein, NIFUN, HML, NIFU, HnifU

Target/Specificity
Human HML / ISCU.

Reconstitution & Storage
Affinity purified

Precautions
Anti-ISCU Antibody (aa3-148) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-ISCU Antibody (aa3-148) - Protein Information

Name ISCU (HGNC:29882)

Synonyms NIFUN

Function
[Isoform 1]: Mitochondrial scaffold protein, of the core iron-sulfur cluster (ISC) assembly complex, that provides the structural architecture on which the [2Fe-2S] clusters are assembled (PubMed:34824239). The core iron-sulfur cluster (ISC) assembly complex is involved in the de novo synthesis of a [2Fe-2S] cluster, the first step of the mitochondrial iron-sulfur protein biogenesis. This process is initiated by the cysteine desulfurase complex (NFS1:LYRM4:NDUFAB1) that produces persulfide which is delivered on the scaffold protein ISCU in a FXN-dependent manner. Then this complex is stabilized by FDX2 which provides reducing equivalents to accomplish the [2Fe-2S] cluster assembly. Finally, the [2Fe-2S] cluster is transferred from ISCU to chaperone proteins, including HSCB, HSPA9 and GLRX5 (PubMed:<a href="http://www.uniprot.org/citations/30031876"

target="_blank">30031876, PubMed:34824239, PubMed:24971490, PubMed:29576242) (Probable). Exists as two slow interchanging conformational states, a structured (S) and disordered (D) form (PubMed:23940031). May modulate NFS1 desulfurase activity in a zinc-dependent manner (PubMed:30031876). Modulates the interaction between FXN and the cysteine desulfurase complex (PubMed:29576242).

Cellular Location
[Isoform 1]: Mitochondrion

Tissue Location
Detected in heart, liver, skeletal muscle, brain, pancreas, kidney, lung and placenta.

Anti-ISCU Antibody (aa3-148) - 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-ISCU Antibody (aa3-148) - Images