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Anti-ISCU Antibody (aa3-148)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18269

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9H1K1
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17999
Concentration (mg/ml)	1 mg/ml

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.

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 (Probable) (PubMed:24971490, PubMed:29576242, PubMed:30031876, PubMed:34824239). 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.