



ISCU Mouse mAb

Catalog No	YP-mAb-19188
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ISCU NIFUN
Immunogen	Synthesized peptide derived from human ISCU
Specificity	This antibody detects endogenous levels of ISCU at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal,Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HML;ISU2;NIFU;NIFUN;hnifU;2310020H20Rik;ISCU;ISCU NIFUN;Iron-sulfur cluster assembly enzyme ISCU;mitochondrial (NifU-like N-terminal domain-containing protein) (NifU-like protein); mitochondrial (NifU-like N-terminal domain-containing protein) (NifU-like protein)
Observed Band	14-18kDa
Calculated Molecular Weight	18kDa
Cell Pathway	[Isoform 1]: Mitochondrion .; [Isoform 2]: Cytoplasm. Nucleus .
Tissue Specificity	Detected in heart, liver, skeletal muscle, brain, pancreas, kidney, lung and placenta.
Function	Scaffold protein for the de novo synthesis of iron-sulfur (Fe-S) clusters within mitochondria, which is required for maturation of both mitochondrial and cytoplasmic [2Fe-2S] and [4Fe-4S] proteins . First, a [2Fe-2S] cluster is transiently assembled on the scaffold protein ISCU. In a second step, the cluster is released from ISCU, transferred to a glutaredoxin GLRX5, followed by the formation of mitochondrial [2Fe-2S] proteins, the synthesis of [4Fe-4S] clusters and their target-specific insertion into the recipient apoproteins. Cluster assembly on ISCU depends on the function of the cysteine desulfurase complex NFS1-LYRM4/ISD11, which serves as the sulfur donor for cluster synthesis, the



iron-binding protein frataxin as the putative iron donor, and the electron transfer chain comprised of ferredoxin reductase and ferredoxin, which receive their electrons from NADH (By similarity). ; [Isoform 2]: Functions as a cytoplasmic scaffold protein for the de novo synthesis of iron-sulfur clusters in the cytoplasm.

Background

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images