Recombinant Mouse Iscu Protein, Myc/DDK-tagged

Cat. No. Iscu-3583M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified recombinant protein of mouse full-length iron-sulfur cluster assembly enzyme (Iscu), with C-terminal MYC/DDK tag, expressed in HEK293T cells.
Species	Mouse
Source	HEK293
Description	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.
Molecular Mass	18.1 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

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Storage	Store at -80 centigrade after receiving vials.
Concentration	>50 μg/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	Iscu iron-sulfur cluster assembly enzyme [Mus musculus (house mouse)]
Official Symbol	Iscu
Synonyms	ISCU; IscU iron-sulfur cluster scaffold homolog (E. coli); iron-sulfur cluster assembly enzyme ISCU, mitochondrial; ISCU2; nifU-like protein; NifU-like N-terminal domain containing; nifU-like N-terminal domain-containing protein; Nifu; Nifun; AA407971; 2310020H20Rik
Gene ID	66383
mRNA Refseq	NM_025526
Protein Refseq	NP_079802
UniProt ID	Q9D7P6

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