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Product datasheet for SC321619

ISCU (NM_213595) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	ISCU
Synonyms:	2310020H20Rik; HML; hnifU; ISU2; NIFU; NIFUN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_213595.1 GGCGCAAGCCGGCAAGATGGCGGCGGCTGGGGCTGGCCGTCTGAGGCGGGTGGCATCGGC TCTGCTGCTGCGGAGCCCCCGCCTGCCCGCCCGGGAGCTGTCGGCCCCGGCCCGACTCTA TCACAAGAAGGTTGTTGATCATTATGAAAATCCTAGAAACGTGGGGTCCCTTGACAAGAC ATCTAAAAATGTTGGAACTGGACTGGTGGGGGCTCCAGCATGTGGTGACGTAATGAAATT ACAGATTCAAGTGGATGAAAAGGGGAAGATTGTGGATGCTAGGTTTAAAACATTTGGCTG TGGTTCCGCAATTGCCTCCAGCTCATTAGCCACTGAATGGGTGAAAGGAAAGACGGTGGA GGAAGCCTTGACTATCAAAAACACAGATATCGCCAAGGAGCTCTGCCTTCCTCCCGTGAA ACTGCACTGCTCCATGCTGGCTGAAGATGCAATCAAGGCCGCCCTGGCTGATTACAAATT GAAACAAGAACCCAAAAAAGGAGAGGCAGAGAAGAAATGAGCCCTCCCTCGGCGAAGCCT CCAGCAGGCCACACCAGCTGTTTCCCACCTGCTGTGCAGTCACCTTAGATGTTCAGAAGC CGCTTCCTCTCCACTGAAGAGCTATGAGATACGCACAATACTTGCTGTTCACGTTATGAC TCTCATGCAAGCAAAATACACAGTTTCATTGTTCTGAATCCTGTGGTTTCTTTCAGCCCA CTTTTATCGCCTTAACCTAGTTAATGTATATTTTGAATTGTGTGTATGACCTCAGAACTG AAATTGATAATGAAGTTGCAAGTTTTGATAGCCCGTGAAGTGCATAAGTATCTAATTTTA CCTGAATTGATTTGGGGGGAAATTACCAGTAGAATGCCTTGGTCTGAATATTTGATAGAA CCAATTGTTGTACATAAAACAGATCTGCGCATATATATATATGTATAAAAAATAATAAAA TAATGGAAGATGAAAAAAAAAAAAAAAAA
Restriction Sites:	Please inquire
ACCN:	NM_213595

View online »

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_213595.1, NP_998760.1

RefSeq Size: 990 bp

RefSeq ORF: 504 bp

Locus ID: 23479

UniProt ID: Q9H1K1

Cytogenetics: 12q23.3

Gene Summary:

This gene encodes a component of the iron-sulfur (Fe-S) cluster scaffold. Fe-S clusters are cofactors that play a role in the function of a diverse set of enzymes, including those that regulate metabolism, iron homeostasis, and oxidative stress response. Alternative splicing results in transcript variants encoding different protein isoforms that localize either to the cytosol or to the mitochondrion. Mutations in this gene have been found in patients with hereditary myopathy with lactic acidosis. A disease-associated mutation in an intron may activate a cryptic splice site, resulting in the production of a splice variant encoding a putatively non-functional protein. A pseudogene of this gene is present on chromosome 1. [provided by RefSeq, Feb 2016]
Transcript Variant: This variant (2) encodes the longest isoform (2). Isoform 2 is localized to the mitochondrion.