

Product datasheet for **RC236130**

ISCU (NM_001301141) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ISCU (NM_001301141) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ISCU
Synonyms: 2310020H20Rik; HML; hnifU; ISU2; NIFU; NIFUN
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC236130 representing NM_001301141
Red=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGGCGGCGGCTGGGGCTTCCGCTCTGAGGCGGGCGGCATCGGCTCTGCTGCTGCGGAGCCCCGCCTGC
CCGCCCCGGGAGCTGTGGCCCCGGCCGACTCTATCACAAGAAGTTGTTGATCATTATGAAAATCCTAG
AAACGTGGGGTCCCTTGACAAGACATCTAAAAATGTTGGAAGTGGACTGGTGGGGCTCCAGCATGTGGT
GACGTAATGAAATTACAGATTCAAGTGGATGAAAAGGGAAGATTGTGGATGCTAGGTTTAAACATTTG
GCTGTGGTTCCGCAATTGCCTCCAGCTCATTAGCCACTGAATGGGTGAAAGGAAAGACGGTGGAGGAAGC
CTTGACTATCAAAAACACAGATATCGCCAAGGAGCTCTGCCTTCCTCCCGTGAAACTGCACTGCTCCAGG
AAAGAAGGAATGAGAAACATTAGCCTTAATGCATCGATGGAGGTTTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236130 representing NM_001301141
Red=Cloning site **Green**=Tags(s)

MAAAGAFRLRRAASALLLRSPRLPARELSAPARLYHKKVVDHYENPRNVGSLDKTSKNVGTGLVGAPACG
DVMKLQIQVDEKGKIVDARFKTFGCGSAIASSSLATEWVKGTVEEALTIKNTDIAKELCLPPVKLHCSR
KEGMRNISLNASMEVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001301141

ORF Size: 468 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001301141.1](#), [NP_001288070.1](#)

RefSeq Size: 2245 bp

RefSeq ORF: 471 bp

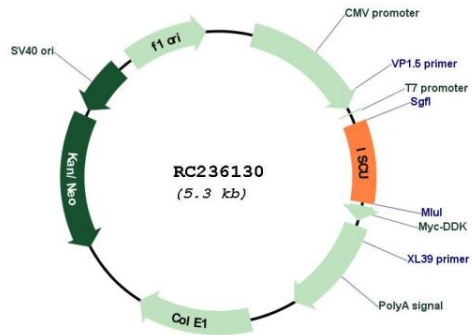
Locus ID: 23479

Cytogenetics: 12q23.3

MW: 17.3 kDa

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]

Product images:



Circular map for RC236130