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Product datasheet for RG212031

ISCU (NM_014301) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ISCU (NM_014301) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ISCU
Synonyms:	2310020H20Rik; HML; hnifU; ISU2; NIFU; NIFUN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG212031 representing NM_014301
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTTCTCATTGACATGAGTGTAGACCTTTCTACTCAGGTTGTTGATCATTATGAAAATCCTAGAAACG
TGGGGTCCCTTGACAAGACATCTAAAAATGTTGGAACTGGACTGGTGGGGGCTCCAGCATGTGGTGACGT
AATGAAATTACAGATTCAAGTGGATGAAAAGGGGAAGATTGTGGATGCTAGGTTTAAAACATTTGGCTGT
GGTTCCGCAATTGCCTCCAGCTCATTAGCCACTGAATGGGTGAAAGGAAAGACGGTGGAGGAAGCCTTGA
CTATCAAAAACACAGATATCGCCAAGGAGCTCTGCCTTCCTCCCGTGAAACTGCACTGCTCCATGCTGGC
TGAAGATGCAATCAAGGCCGCCCTGGCTGATTACAAATTGAAACAAGAACCCAAAAAAGGAGAGGCAGAG
AAGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG212031 representing NM_014301
Red=Cloning site Green=Tags(s)

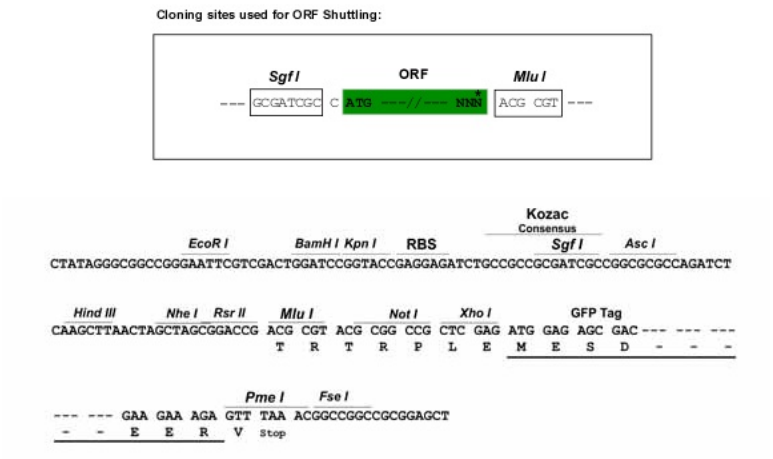
MVLIDMSVDLSTQVVDHYENPRNVGSLDKTSKNVGTGLVGAPACGDVMKLQIQVDEKGKIVDARFKTFGC
GSAIASSSLATEWVKGKTVEEALTIKNTDIAKELCLPPVKLHCSMLAEDAIKAALADYKLKQEPKKGEAE
KK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



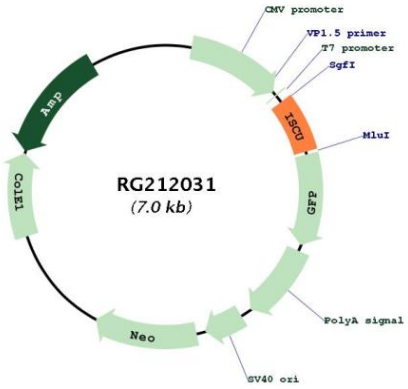
ACCN:	NM_014301
ORF Size:	426 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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.
RefSeq:	NM_014301.4
RefSeq Size:	1086 bp
RefSeq ORF:	429 bp
Locus ID:	23479
UniProt ID:	Q9H1K1

Cytogenetics: 12q23.3

Domains: NifU_N

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 RG212031