

# **Product datasheet for SC300440**

### **OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

## NFU1 (NM\_001002756) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** NFU1 (NM\_001002756) Human Untagged Clone

Tag: Tag Free Symbol: NFU1

Synonyms: CGI-33; HIRIP; HIRIP5; MMDS1; Nfu; NifU; NIFUC

**Vector:** pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001002756, the custom clone sequence may differ by one or

more nucleotides

ATGGACTTCTTTGCATCTGGCTTACCCCTGGTTACTGAGGAAACACCTTCAGGAGAAGCA
GGATCTGAAGAAGATGATGAAGTTGTGGCAATGATTAAGGAATTGTTAGATACTAGAATA
CGGCCAACTGTGCAGGAAGATGGAGGGGATGTAATCTACAAAGGCTTTGAAGATGGCATT
GTACAGCTGAAACTCCAGGGTTCTTGTACCAGCTGCCCTAGTTCAATCATTACTCTGAAA
AATGGAATTCAGAACATGCTGCAGTTTTATATTCCGGAGGTAGAAGGCCTAGAACAGGTT

ATGGATGATGAATCAGATGAAAAAGAAGCAAACTCACCTTAA

**Restriction Sites:** Please inquire ACCN: NM 001002756

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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.

RefSeq: <u>NM 001002756.1</u>, <u>NP 001002756.1</u>

RefSeq Size: 1045 bp
RefSeq ORF: 342 bp
Locus ID: 27247
UniProt ID: Q9UMS0
Cytogenetics: 2p13.3

**Gene Summary:** This gene encodes a protein that is localized to mitochondria and plays a critical role in iron-

sulfur cluster biogenesis. The encoded protein assembles and transfers 4Fe-4S clusters to target apoproteins including succinate dehydrogenase and lipoic acid synthase. Mutations in this gene are a cause of multiple mitochondrial dysfunctions syndrome-1, and pseudogenes of this gene are located on the short arms of chromosomes 1 and 3. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by

RefSeq, Dec 2011]

Transcript Variant: This variant (3) lacks an internal exon and initiates translation at a downstream, in-frame start codon, compared to variant 1. The encoded isoform (3) has a

shorter N-terminus, compared to isoform 1.