

# **Product datasheet for RG231526**

### OriGene Technologies, Inc.

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## DAP13 (NDUFA12) (NM\_001258338) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: DAP13 (NDUFA12) (NM\_001258338) Human Tagged ORF Clone

Tag: TurboGFP Symbol: NDUFA12

Synonyms: B17.2; DAP13; MC1DN23

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG231526 representing NM\_001258338 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGAGTTAGTGCAGGTCCTGAAACGCGGGCTGCAGCAGATCACCGGCCACGGCGGTCTCCGAGGCTATC
TACGGGTTTTTTTCAGGACAAATGATGCGAAGGTTGGTACATTAGTGGGGAAGACAAATATGGAAACAA

ATACTATGAAGACAACAAGCAATTTTTTGGCATCGTTGGCTTCACAGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231526 representing NM\_001258338

Red=Cloning site Green=Tags(s)

MELVQVLKRGLQQITGHGGLRGYLRVFFRTNDAKVGTLVGEDKYGNKYYEDNKQFFGIVGFTV

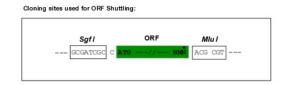
TRTRPLE - GFP Tag - V

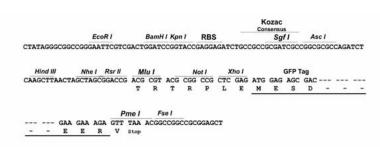
**Restriction Sites:** Sgfl-Mlul



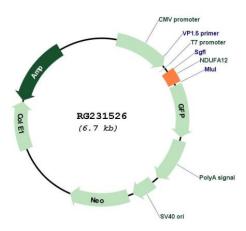


## **Cloning Scheme:**





### Plasmid Map:



**ACCN:** NM\_001258338

ORF Size: 189 bp



#### DAP13 (NDUFA12) (NM\_001258338) Human Tagged ORF Clone - RG231526

**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: <u>NM 001258338.1</u>, <u>NP 001245267.1</u>

 RefSeq Size:
 504 bp

 RefSeq ORF:
 192 bp

 Locus ID:
 55967

 UniProt ID:
 Q9UI09

 Cytogenetics:
 12q22

**Gene Summary:** This gene encodes a protein which is part of mitochondrial complex 1, part of the oxidative

phosphorylation system in mitochondria. Complex 1 transfers electrons to ubiquinone from NADH which establishes a proton gradient for the generation of ATP. Mutations in this gene are associated with Leigh syndrome due to mitochondrial complex 1 deficiency. Pseudogenes of this gene are located on chromosomes 5 and 13. Alternative splicing results in multiple

transcript variants. [provided by RefSeq, Apr 2012]