

Product datasheet for RC216357L3

OriGene Technologies, Inc.

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AIF (AIFM1) (NM 145813) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: AIF (AIFM1) (NM_145813) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: AIF

Synonyms: AIF; CMT2D; CMTX4; COWCK; COXPD6; NADMR; NAMSD; PDCD8

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC216357).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_145813

ORF Size: 978 bp



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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 145813.1</u>

RefSeq Size: 1354 bp
RefSeq ORF: 981 bp
Locus ID: 9131

Cytogenetics: Xq26.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Apoptosis

MW: 35.5 kDa

Gene Summary: This gene encodes a flavoprotein essential for nuclear disassembly in apoptotic cells, and it is

found in the mitochondrial intermembrane space in healthy cells. Induction of apoptosis results in the translocation of this protein to the nucleus where it affects chromosome condensation and fragmentation. In addition, this gene product induces mitochondria to release the apoptogenic proteins cytochrome c and caspase-9. Mutations in this gene cause combined oxidative phosphorylation deficiency 6 (COXPD6), a severe mitochondrial

encephalomyopathy, as well as Cowchock syndrome, also known as X-linked recessive Charcot-Marie-Tooth disease-4 (CMTX-4), a disorder resulting in neuropathy, and axonal and motor-sensory defects with deafness and cognitive disability. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 10.

[provided by RefSeq, Aug 2015]