

## Product datasheet for **RC216357L4V**

### AIF (AIFM1) (NM\_145813) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	AIF (AIFM1) (NM_145813) Human Tagged ORF Clone Lentiviral Particle
Symbol:	AIFM1
Synonyms:	AIF; CMT2D; CMTX4; COWCK; COXPD6; NADMR; NAMSD; PDCD8
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_145813
ORF Size:	978 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC216357).
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. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_145813.1</a>
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



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**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]