

## Product datasheet for **MG216114**

### Fndc5 (NM\_027402) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Fndc5 (NM\_027402) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Fndc5  
**Synonyms:** 1500001L03Rik; AI836596; C87088; P; PeP; Pxp  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG216114 representing NM\_027402  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCCCAGGGCGTGCCTGGCCGCCCGCGCGCTCCGCTGTGGCTAGGCTGCGTCTGCTTCG  
CGCTGGTGCAGGCGGACAGCCCTCAGCCCTGTGAACGTGACCGTCCGGCACCTCAAGGCCAAGCTGC  
CGTGGTCACTGGGATGCTCCTGGAGGATGAAGTGGTCAATGGCTTTGCCATCTCTCAGCAGAAGAAGGAT  
GTGGGATGCTCCGGTTCATTAGGAGGTGAACACCACCACCCGGTCTGCGCTCTCTGGGACCTGGAGG  
AGGACACAGAATATATCGTCCATGTGCAGGCCATCTCCATCCAGGACAGAGCCAGCCAGTGAGCCTGT  
GCTCTTCAAGACCCACGCGAGGCTGAAAAGATGGCCTCAAGAACAAGATGAGGTGACCATGAAGGAG  
ATGGGGAGGAACAGCAGCTGCGAACGGGGAGGTGCTGATCATTGTTGGTCTCTTCAATGTGGGAG  
GTGTTATAGCTCTTCTGCCGCCAGTATGATATCATCAAGGACAACGAGCCCAATAACAACAAGGAGAA  
AACCAAGAGCGCATCAGAAACCAGCACACCCGGAGCATCAGGGTGGGGTCTCTCCCGCAGCAAGATA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG216114 representing NM\_027402  
Red=Cloning site Green=Tags(s)

MPPGPCAWPPRAALRLWLGCVCFALVQADSPSAPVNVTVRHLKANSVSVSWDVLEDEVVIGFAISQQKKD  
VRMLRFIQEVNTTTRSCALWDLEEDTEYIVHVQAIISIQQSPASEPVLFKTPREAEKMASKNKDDEVTKME  
MGRNQQLRTGEVLIIVVLFMWAGVIALFCRQYDIKDNPNNNKEKTKSASETSTPEHQGGLLRSKI

**TRTRPLE** - GFP Tag - V

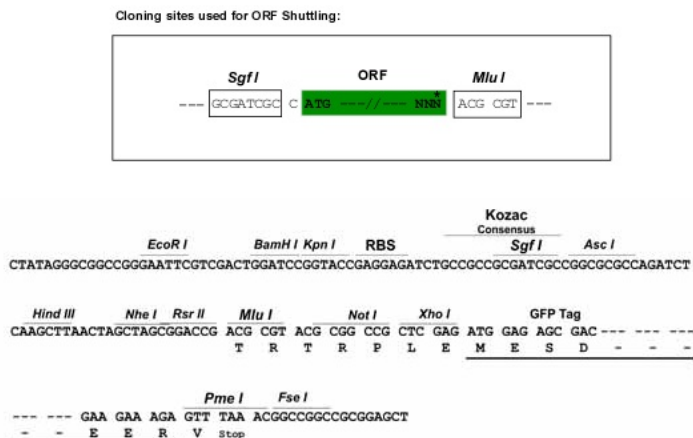
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2279\\_b04.zip](https://cdn.origene.com/chromatograms/ja2279_b04.zip)



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**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_027402

**ORF Size:** 627 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_027402.4](#)

RefSeq Size: 2718 bp

RefSeq ORF: 630 bp

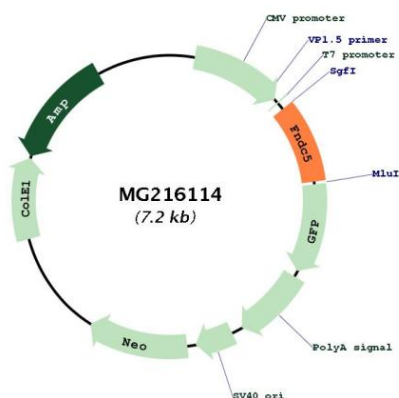
Locus ID: 384061

UniProt ID: [Q8K4Z2](#)

Cytogenetics: 4 D2.2

**Gene Summary:** This gene encodes a type I transmembrane protein containing fibronectin type III repeat. The encoded transmembrane protein undergoes proteolytic processing to generate a soluble hormone named irisin that is secreted into the bloodstream. The expression of this gene followed by the secretion of irisin from skeletal muscle is induced by exercise. The ectopic expression of the encoded protein in mice causes an elevation of irisin in blood and improves metabolic health. [provided by RefSeq, Jul 2016]

### Product images:



Circular map for MG216114