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Product datasheet for MG204407

Metrnl (NM_144797) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Metrnl (NM_144797) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Metrnl
Synonyms:	9430048M07Rik; BC019776
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG204407 representing NM_144797
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGGGTGCGGTGTGGGCGGCCCGGAGGCGCGCGGGGCAGCAGTGGCCTCGGTCCCCGGGCCCTGGGC
CGGGTCCGCCCCCGCCGCCACCGCTGCTGTTGCTGCTACTACTGCTGCTGGGCGGCGCGAGCGCTCAGTA
CTCCAGCGACCTGTGCAGCTGGAAGGGGAGTGGGCTCACCCGAGAGGCACGCAGCAAGGAGGTGGAGCAG
GTGTACCTGCGCTGCTCCGCAGGCTCTGTGGAGTGGATGTACCCAACTGGGGCGCTCATTGTTAACCTAC
GGCCCAACACCTTCTCACCTGCCCAGAACTTGACTGTGTGCATCAAGCCTTTCAGGGACTCCTCTGGAGC
CAATATTTATTTGGAAAAAACTGGAGAACTAAGACTGTTGGTGCGGGACATCAGAGGTGAGCCTGGCCAA
GTGCAGTGCTTCAGCCTGGAGCAGGGAGGCTTATTTGTGGAGGCGACACCCCAACAGGACATCAGCAGAA
GGACCACAGGCTTCCAGTATGAGCTGATGAGTGGGCAGAGGGGACTGGACCTGCACGTGCTGTCTGCCCC
CTGTCGGCCTTGCAGTGACACTGAGGTCCTCCTTGCCATCTGTACCAGTGACTTTGTTGTCCGAGGCTTC
ATTGAGGACGTCACACATGTACCAGAACAGCAAGTGTCAGTCATCTACCTGCGGGTGAACAGGCTTCACA
GGCAGAAGAGCAGGGTCTTCCAGCCAGCTCCTGAGGACAGTGGCCACTGGCTGGGCCATGTCACAACACT
GCTGCAGTGTGGAGTACGACCAGGGCATGGGGAATTCCTCTTCACTGGACATGTGCACTTTGGGGAGGCA
CAACTTGGATGTGCCCCACGCTTTAGTGACTTTCAAAGGATGTACAGGAAAGCAGAAGAAATGGGCATAA
ACCCCTGTGAAATCAATATGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

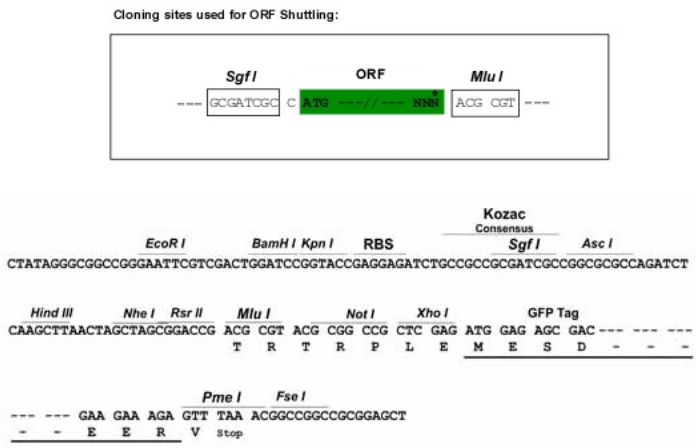
>MG204407 representing NM_144797
Red=Cloning site Green=Tags(s)

MRGAVWAARRRAGQQWPRSPGPGPGPPPPPPLLLLLLLLLGGASAQYSSDLCSWKGSGLTREARSKEVEQ
VYLRCSAGSVEWMYPTGALIVNLRPNTFSPAQNLTVCIKPFRDSSGANIYLEKTGELRLLVRDIRGEPGQ
VQCFSLEQGGLFVEATPQQDISRRTTGFQYELMSGQRGLDLHVLSAPCRPCSDTEVLLAICTSDFVVRGF
IEDVTHVPEQQVSVIYLRVNRLHRQKSRVFQPAPEDSGHWLGHVTTLLQCGVRPGHGEFLFTGHVHFGEA
QLGCAPRFSDFQRMYRKAEEMGINPCEINME

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144797

ORF Size: 933 bp

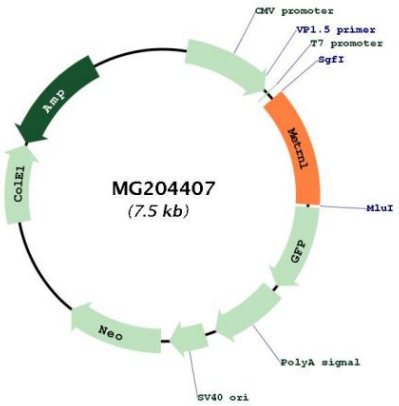
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_144797.3
RefSeq Size:	2469 bp
RefSeq ORF:	936 bp
Locus ID:	210029
UniProt ID:	Q8VE43
Cytogenetics:	11 E2
Gene Summary:	Hormone induced following exercise or cold exposure that promotes energy expenditure. Induced either in the skeletal muscle after exercise or in adipose tissue following cold exposure and is present in the circulation. Able to stimulate energy expenditure associated with the browning of the white fat depots and improves glucose tolerance. Does not promote an increase in a thermogenic gene program via direct action on adipocytes, but acts by stimulating several immune cell subtypes to enter the adipose tissue and activate their prothermogenic actions. Stimulates an eosinophil-dependent increase in IL4 expression and promotes alternative activation of adipose tissue macrophages, which are required for the increased expression of the thermogenic and anti-inflammatory gene programs in fat. Required for some cold-induced thermogenic responses, suggesting a role in metabolic adaptations to cold temperatures.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG204407