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Product datasheet for RG210299

METRNL (NM_001004431) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	METRNL (NM_001004431) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	METRNL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG210299 representing NM_001004431
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGGGCGCGGCGCGGGCGGCCTGGGGGCGCGCGGGGCAGCCGTGGCCGCGACCCCCCGCCCCGGGCC
CGCCCCCGCCGCCGCTCCCGCTGCTGCTCCTGCTCCTGGCCGGGCTGCTGGGCGGCGCGGGCGCGCAGTA
CTCCAGCGACCGGTGCAGCTGGAAGGGGAGCGGGCTGACGCACGAGGCACACAGGAAGGAGGTGGAGCAG
GTGTATCTGCGCTGTGCGGCGGGTGCCGTGGAGTGGATGTACCCAACAGGTGCTCTCATCGTTAACCTGC
GGCCCAACACCTTCTCGCCTGCCCGGCACCTGACCGTGTGCATCAGGTCCTTCACGGACTCCTCGGGGGC
CAATATTTATTTGGAAAAAACTGGAGAACTGAGACTGCTGGTACCGGACGGGGACGGCAGGCCCGGCCGG
GTGCAGTGTTTTGGCCTGGAGCAGGGCGGCCTGTTCGTGGAGGCCACGCCGCAGCAGGATATCGGCCGGA
GGACCACAGGCTTCCAGTACGAGCTGGTTAGGAGGCACAGGGCGTCGGACCTGCACGAGCTGTCTGCGCC
GTGCCGTCCCTGCAGTGACACCGAGGTGCTCCTAGCCGTCTGCACCAGCGACTTCGCCGTTCGAGGCTCC
ATCCAGCAAGTTACCCACGAGCCTGAGCGGCAGGACTCAGCCATCCACCTGCGCGTGAGCAGACTCTATC
GGCAGAAAAGCAGGGTCTTCGAGCCGGTGCCCGAGGGTGACGGCCACTGGCAGGGGCGCGTCAGGACGCT
GCTGGAGTGTGGCGTGCGGCCGGGGCATGGCGACTTCCTCTTCACTGGCCACATGCACTTCGGGGAGGCG
CGGCTCGGCTGTGCCCCACGCTTCAAGGACTTCCAGAGGATGTACAGGGATGCCCAGGAGAGGGGGCTGA
ACCCTTGTGAGGTTGGCACGGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

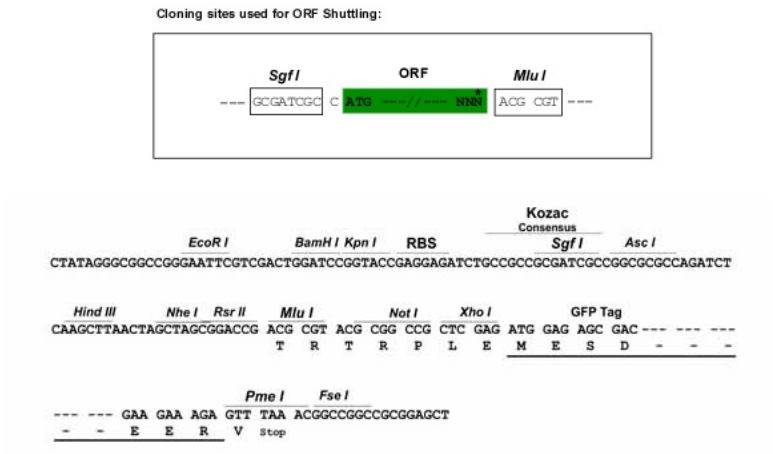
>RG210299 representing NM_001004431
Red=Cloning site Green=Tags(s)

MRGAARAAWGRAGQPWPRPPAPGPPPPPLPLLLLLLAGLLGGAGAQYSSDRCSWKGSGLTHEAHRKEVEQ
VYLRCAAGAVEWMYPTGALIVNLRPNTFSPARHLTVCIRSFTDSSGANIYLEKTGELRLLVPDGDGRPGR
VQCFGLEQGGLFVEATPQQDIGRRTTGFQYELVRRHRASDLHELSAPCRPCSDTEVLLAVCTSDFAVRGS
IQQVTHEPERQDSAIHLRVSRLYRQKSRVFEPVPEGDGHWQGRVRTLLECGVRPGHGDFLFTGHMHFGEA
RLGCAPRFKDFQRMYRDAQERGLNPCEVGTD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001004431

ORF Size: 933 bp

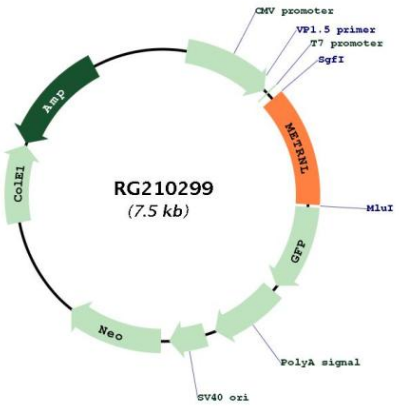
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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_001004431.1, NP_001004431.1
RefSeq Size:	1348 bp
RefSeq ORF:	936 bp
Locus ID:	284207
UniProt ID:	Q641Q3
Cytogenetics:	17q25.3
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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG210299