

## Product datasheet for **RN204359**

### **Metrnl (NM\_001014104) Rat Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Metrnl (NM\_001014104) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Metrnl  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >RN204359 representing NM\_001014104  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCGGGGTGTGGTGTGGGCGGCCCGGAGGCGCGGGGCGAGCAGTGGCCTCGGTCCCCGGGCCCTGGGC  
 CGGGTCCGCCCCCGCCGACCGCTGCTGTTGCTGCTACTGCTGCTGGGCGGCGGAGCGCGCAGTA  
 CTCCAGCGACCTGTGCAGCTGGAAGGGGAGTGGGCTCACCCGGGAGGCACACAGCAAGGAGGTGGAGCAG  
 GTGTACCTGCGCTGCTCAGCAGGCTCTGTGGAATGGATGTACCAACCGGGGCGCTCATTGTTAACCTAC  
 GGCCCAACACCTTCTCACCTGCCAGAACTTGACTGTGTGCATCAAGCCTTTCAGGGACTCCTCTGGGGC  
 CAATATTTATTTGGAAAAAAGTGGAGAAGTAAAGTGTGGTGGCGGATGTGAGAGCGAACTGGCCAA  
 GTGCAGTGCTTCAGCCTAGAGCAGGGAGGCTTATTTGTGGAGGCCACACCCAGCAGGACATCAGCAGAA  
 GGACCACAGGCTTCCAGTATGAGCTGATGAGTGGGCGAGGGGACTGGACCTGCACGTGCTCTGCCCC  
 CTGTGACCTTGCAGCGACACTGAGGTCCTCCTTGCCATCTGCACCAGTGACTTTGTTGTCGAGGCTTC  
 ATCGAGGATGTCACCCATGTACCAGAACAGCAAGTGTGAGTACCTACCGGTGAGCAGGCTCCACA  
 GGCAGAAGAGCAGGCTTCCAGCCAGCTCCTGAGGACAGTGGCCACTGGCTGGGCCATGCACAACACT  
 GTTGCAGTGTGGAGTACGACCAGGCATGGAGAATTCCTTCTCACTGGACATGTGCACTTTGGGGAGGCA  
 CAACTTGGATGTCCCCACGCTTGTAGTACTTTCAAAGATGTACAGGAAAGCAGAAGAAAGGGGCATAA  
 ACCCTTGTGAAATAAATATGGAG**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-MluI  
**ACCN:** NM\_001014104  
**Insert Size:** 936 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001014104.1</a></u> , <u><a href="#">NP_001014126.1</a></u>
<b>RefSeq Size:</b>	1380 bp
<b>RefSeq ORF:</b>	936 bp
<b>Locus ID:</b>	316842
<b>UniProt ID:</b>	<u><a href="#">Q5RIL6</a></u>
<b>Cytogenetics:</b>	10q32.3
<b>Gene Summary:</b>	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]