

## Product datasheet for RC211704

### C 4 Methylsterol Oxidase (MSMO1) (NM\_001017369) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** C 4 Methylsterol Oxidase (MSMO1) (NM\_001017369) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** C 4 Methylsterol Oxidase  
**Synonyms:** DESP4; ERG25; MCCPD; SC4MOL  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC211704 representing NM\_001017369  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCAAGATGGTATTTCTTTGGCAAGATGCTTTGGTTGTGCAGTCATTGAAGATACTTGGCACTATT  
 TTCTGCATAGACTCTTACACCACAAAAGAATATACAAGTATATTCATAAAGTTCATCATGAGTTTCAGGC  
 TCCATTTGGAATGGAAGCTGAATATGCACATCCTTTGGAGACTCTAATCTTGGAACTGGATTTTTCATT  
 GGAATCGTGCTTTGTGTGATCATGTAATCTTCTTTGGCATGGGTGACCATTCGTTTATTAGAACTA  
 TTGATGTCCATAGTGTTATGATATTCCTCTCAACCTTTAAATCTGATCCCTTCTATGCTGGTTCTCG  
 GCATCATGATTTCCACCACATGAACTTCATTGGAACTATGCTTCAACATTTACATGGTGGGATCGAATT  
 TTTGGAACAGACTCTCAGTATAATGCCTATAATGAAAAGAGGAAGAAGTTTGAGAAAAAGACTGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC211704 representing NM\_001017369  
 Red=Cloning site Green=Tags(s)

MPRWYFLLARCFGCAVIEDTWHYFLHRLHKKRIYKYIHKVHHEFQAPFGMEAEYAHPLETILGTGFFI  
 GIVLLCDHVILLWAWVTIRLLETIDVHSGYDIPLNPLNIPFYAGSRHDFHMFIGNYASTFTWWDRI  
 FGTDSQYNAYNEKRKKFEKKTE

**TR**TRPLEQK**L**ISEEDLAANDILDYKDDDDK**V**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6243\\_e06.zip](https://cdn.origene.com/chromatograms/mk6243_e06.zip)



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001017369

ORF Size: 486 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.

RefSeq: [NM\\_001017369.2](#)

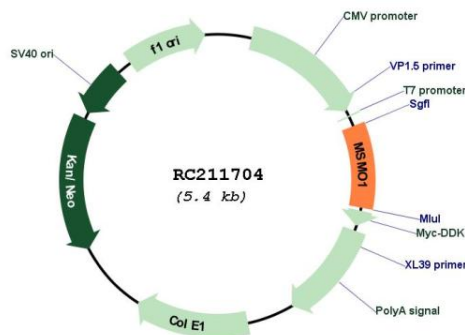
RefSeq Size: 1928 bp

RefSeq ORF: 489 bp

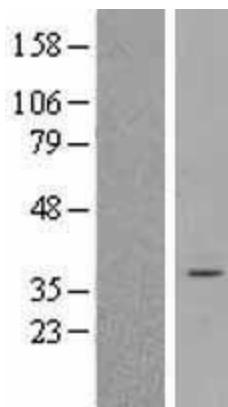
Locus ID: 6307

**UniProt ID:** [Q15800](#)  
**Cytogenetics:** 4q32.3  
**Protein Families:** Transmembrane  
**Protein Pathways:** Metabolic pathways, Steroid biosynthesis  
**MW:** 19.3 kDa  
**Gene Summary:** Sterol-C4-methyl oxidase-like protein was isolated based on its similarity to the yeast ERG25 protein. It contains a set of putative metal binding motifs with similarity to that seen in a family of membrane desaturases-hydroxylases. The protein is localized to the endoplasmic reticulum membrane and is believed to function in cholesterol biosynthesis. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC211704



Western blot validation of overexpression lysate (Cat# [LY422643]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211704 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).