

Product datasheet for **MR228677**

Pomc (NM_001278581) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pomc (NM_001278581) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pomc
Synonyms:	ACT; ACTH; alp; alph; alpha-MSH; alphaMSH; BE; Beta-LPH; beta-M; beta-MSH; Clip; gamma-; Gamma-LPH; gamma-MSH; Npp; PO; Pomc-1; Pomc1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR228677 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGAGATTCTGCTACAGTCGCTCAGGGCCCTGTTGCTGGCCCTCCTGCTTCAGACCTCCATAGATG
TGTGGAGCTGGTGCCTGGAGAGCAGCCAGTGCCAGGACCTCACCACGGAGAGCAACCTGCTGGCTTGCAT
CCGGGCTTGCAAACCTCGACCTCTCGCTGGAGACGCCCGTGTTCCTGGCAACGGAGATGAACAGCCCTG
ACTGAAAACCCCGAAGTACGTCATGGGTCACCTCCGCTGGGACCGCTTCGGCCCCAGGAACAGCAGCA
GTGCTGGCAGCGCGGCAGAGGCGTCCGGAGGAAGAGCGGTGTGGGGAGATGGCAGTCCAGAGCCGAG
TCCACGCGAGGGCAAGCGCTCCTACTCCATGGAGCACTCCGCTGGGCAAGCCGGTGGGCAAGAAACGG
CGCCCGGTGAAGGTGTACCCCAACGTTGCTGAGAACGAGTCGGCGGAGGCCTTCCCTAGAGTTCAAGA
GGGAGCTGGAAGCGAGCGGCCATTAGGCTTGGAGCAGGTCCTGGAGTCCGACCGGAGAAGGACGACGG
GCCCTACCGGTGGAGCACTTCCGCTGGAGCAACCCGCCAAGGACAAGCGTTACGGTGGCTTCATGACC
TCCGAGAAGAGCCAGACGCCCTGGTGACGCTCTTCAAGAACGCCATCATCAAGAACGCGCACAGAAGG
GCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



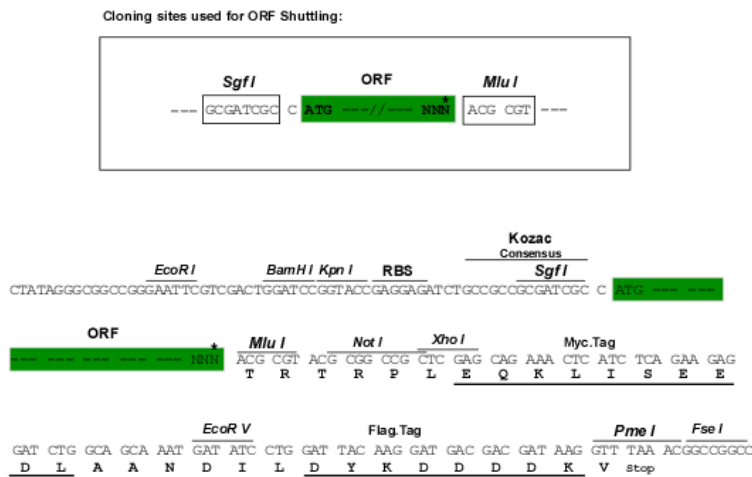
Protein Sequence: >MR228677 protein sequence
Red=Cloning site Green=Tags(s)

MPRFCYSRSGALLLALLLQTSIDVSWCLESSQCQDLTTESNLLACIRACKLDLSLETPVFPNGDEQPL
 TENPRKYVMGHFRWDRFGPRNSSAGSAAQRRAEAAVWGDGSPSPREGKRSYSMEHFRWGKPVGKKR
 RPVKVYPNVAENESAEAFPLEFKRELEGERPLGLEQVLESDAEKDDGPYRVEHFRWSNPPKDKRYGGFMT
 SEKSQTPLVTLFKNAIKNNAHKKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001278581

ORF Size: 708 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_001278581.1](#), [NP_001265510.1](#)

RefSeq Size: 1214 bp

RefSeq ORF: 708 bp

Locus ID: 18976

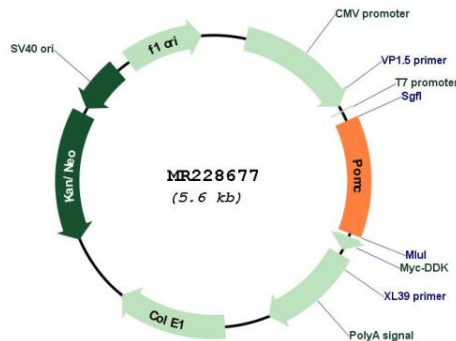
UniProt ID: [P01193](#)

Cytogenetics: 12 1.99 cM

MW: 26.7 kDa

Gene Summary: This gene encodes a polypeptide hormone precursor that undergoes extensive, tissue-specific, post-translational processing. Processing yields several biologically active peptides, which are involved in diverse cellular functions, such as energy homeostasis, steroidogenesis, and increased melanin production in melanocytes. In mouse deficiency of this gene is associated with obesity, defects in adrenal development, and altered pigmentation. A pseudogene of this gene is located on chromosome 19. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2013]

Product images:



Circular map for MR228677