

# **Product datasheet for MR228678**

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OriGene Technologies, Inc.

## Pomc (NM 001278582) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Pomc (NM\_001278582) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Pomc

Synonyms: ACT; ACTH; alp; alpha-MSH; alpha-MSH; 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>MR228678 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





**Protein Sequence:** >MR228678 protein sequence

Red=Cloning site Green=Tags(s)

MPRFCYSRSGALLLALLLQTSIDVWSWCLESSQCQDLTTESNLLACIRACKLDLSLETPVFPGNGDEQPL TENPRKYVMGHFRWDRFGPRNSSSAGSAAQRRAEEEAVWGDGSPEPSPREGKRSYSMEHFRWGKPVGKKR RPVKVYPNVAENESAEAFPLEFKRELEGERPLGLEQVLESDAEKDDGPYRVEHFRWSNPPKDKRYGGFMT SEKSQTPLVTLFKNAIIKNAHKKGQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

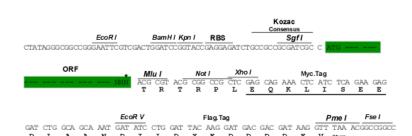
Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:

Sgf1 ORF Miu I

--- GCGATCGC C ATG ---//-- NNN ACG CGT



<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001278582

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 001278582.1, NP 001265511.1

RefSeq Size:1149 bpRefSeq ORF:708 bpLocus ID:18976

 UniProt ID:
 P01193

 Cytogenetics:
 12 1.99 cM

 MW:
 26.7 kDa

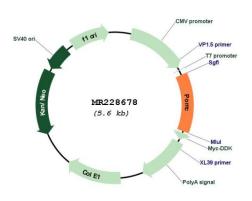
Gene Summary:

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 RefSeg, Jun 2013]

## **Product images:**



Circular map for MR228678