

## Product datasheet for RC202828

### PAM16 (NM\_016069) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PAM16 (NM\_016069) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PAM16  
**Synonyms:** CGI-136; MAGMAS; SMDMDM; TIM16; TIMM16  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC202828 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCAAGTACCTGGCCAGATCATTGTGATGGGCGTGCAGGTGGTGGGCAGGGCCTTTGCACGGGCT  
TGCGGCAGGAGTTTGCAGCCAGCCGGCCGAGCTGATGCCCGAGGACGCGCTGGACACCGGTCTGCAGC  
CGTTCCAACCTCTCCGGCCTCAGCCTCCAGGAGGCACAGCAGATTCTCAACGTGTCCAAGCTGAGCCCT  
GAGGAGGTCCAGAAGAACTATGAACACTTATTTAAGGTGAATGATAAATCCGTGGGTGGCTCCTTCTACC  
TGCAGTCAAAGGTGGTCCGCGCAAAGGAGCGCCTGGATGAGGAACTCAAATCCAGGCCAGGAGGACAG  
AGAAAAAGGGCAGATGCCCATACG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202828 protein sequence  
 Red=Cloning site Green=Tags(s)  
 MAKYLAQIIVMGVQVVGRAFARALRQEF AASRAAADARGRAGHRSAAASNLSGLSLQEAQQILNVSKLSP  
 EEVQKNYEHLFKVNDKSVGGSFYLQSKVVRAKERLDEELKIQAQEDREKGQMPHT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6412\\_f04.zip](https://cdn.origene.com/chromatograms/mk6412_f04.zip)

**Restriction Sites:** SgfI-MluI



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Cloning Scheme:



ACCN: NM\_016069

ORF Size: 375 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\\_016069.9](#)

RefSeq Size: 600 bp

RefSeq ORF: 378 bp

Locus ID: 51025

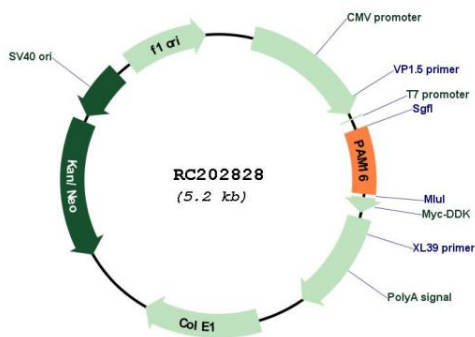
UniProt ID: [Q9Y3D7](#)

**Cytogenetics:** 16p13.3

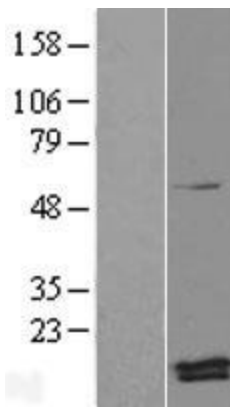
**MW:** 13.8 kDa

**Gene Summary:** This gene encodes a mitochondrial protein involved in granulocyte-macrophage colony-stimulating factor (GM-CSF) signaling. This protein also plays a role in the import of nuclear-encoded mitochondrial proteins into the mitochondrial matrix and may be important in reactive oxygen species (ROS) homeostasis. Mutations in this gene cause Megarbane-Dagher-Melike type spondylometaphyseal dysplasia, an early lethal skeletal dysplasia characterized by short stature, developmental delay and other skeletal abnormalities. [provided by RefSeq, May 2017]

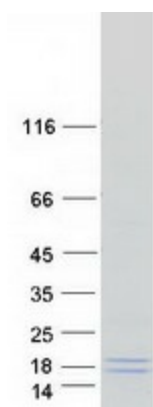
**Product images:**



Circular map for RC202828



Western blot validation of overexpression lysate (Cat# [LY414208]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202828 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PAM16 protein (Cat# [TP302828]). The protein was produced from HEK293T cells transfected with PAM16 cDNA clone (Cat# RC202828) using MegaTran 2.0 (Cat# [TT210002]).