

Product datasheet for **RC209988**

MPS1 (RPS27) (NM_001030) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MPS1 (RPS27) (NM_001030) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: MPS1
Synonyms: DBA17; MPS-1; MPS1; S27
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC209988 representing NM_001030
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTCTCGAAAGGATCTCCTTCATCCCTCTCCAGAAGAGGAGAAGAGGAAACACAAGAAGAAACGCC
TGGTGCAGAGCCCAATTCCTACTTCATGGATGTGAAATGCCAGGATGCTATAAAATCACCACGGTCTT
TAGCCATGCACAAACGGTAGTTTTGTGTGTTGGCTGCTCCACTGTCTCTGCCAGCCTACAGGAGGAAAA
GCAAGGCTTACAGAAGGATGTTCTTCAGGAGGAAGCAGCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209988 representing NM_001030
Red=Cloning site Green=Tags(s)

MPLAKDLLHPSPEEEKRKHKKRRLVQSPNSYFMDVKCPGKYKITTTFVSHAQTVVLCVGCSTVLCQPTGGK
ARLTEGCSFRRKQH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8114_c04.zip

Restriction Sites: Sgfl-Mlul



[View online »](#)

Cloning Scheme:


ACCN: NM_001030

ORF Size: 252 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_001030.6](#)

RefSeq Size: 361 bp

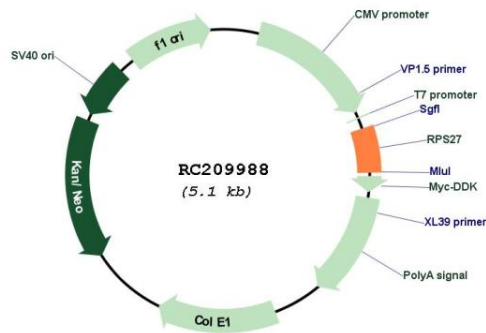
RefSeq ORF: 255 bp

Locus ID: 6232

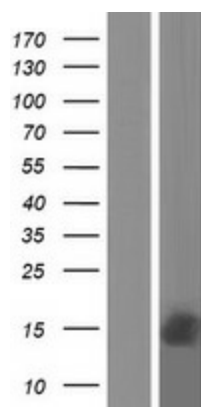
UniProt ID: [P42677](#)
Cytogenetics: 1q21.3
Domains: Ribosomal_S27e
Protein Pathways: Ribosome
MW: 9.5 kDa

Gene Summary: Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of four RNA species and approximately 80 structurally distinct proteins. This gene encodes a member of the S27e family of ribosomal proteins and component of the 40S subunit. The encoded protein contains a C4-type zinc finger domain that can bind to zinc and may bind to nucleic acid. Mutations in this gene have been identified in numerous melanoma patients and in at least one patient with Diamond-Blackfan anemia (DBA). Elevated expression of this gene has been observed in various human cancers. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome. [provided by RefSeq, Jul 2018]

Product images:



Circular map for RC209988



Western blot validation of overexpression lysate (Cat# [LY422280]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209988 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).