

Product datasheet for RC236688

OriGene Technologies, Inc.

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Major Basic Protein (PRG2) (NM_001302926) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Major Basic Protein (PRG2) (NM_001302926) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Major Basic Protein

Synonyms: BMPG; MBP; MBP1; proMBP

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC236688 representing NM_001302926 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAAACTCCCCCTACTTCTGGCTCTTCTATTTGGGGCAGTTTCTGCTCTTCATCTAAGGTCTGAGACTT
CCACCTTTGAGACCCCTTTGGGTGCTAAGACGCTGCCTGAGGATGAGGAGACACCAGAGCAGGAGAGATGGA
GGAGACCCCTTGCAGGGAGCTGGAGGAAGAGGAGGAGGAGGAGGAGACACCAGAGCAGGAGAGAGAAA
GATGGGGCTGTTGAGTCTATCTCAGTGCCAGATATGGTGGACAAAAACCTTACGTGTCCTGAGGAAGAGG
ACACAGTAAAAGTGGTGGGCATCCCTGGGTGCCAGACCTGCCGCTACCTCCTGGTGAGAAGTCTTCAGAC
GTTTAGTCAAGCTTGGTTTACTTGCCGGAGGTGCTACAGGGGCAACCTGGTTTCCATCACAACTTCAAT
ATTAATTATCGAATCCAGTGTTCTGTCAGCGGCTCAACCAGGGTCAAGTCTGGATTGGAGGCAGGATCA
CAGGCTCGGGTCGCTGCAGACGCTTTCAGTGGGTTGACGGCAGCCCTGGAACTTTGCGTACTGGGCTGC
TCACCAGCCCTGGTCCCGCGGTGGTCACTGCGTGGCCCTGTGTACCCGAGGAGGCTACTGGCGTCGAGCC
CACTGCCTCAGAAGACTTCCTTTCATCTGTTCCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC236688 representing NM_001302926

Red=Cloning site Green=Tags(s)

MKLPLLLALLFGAVSALHLRSETSTFETPLGAKTLPEDEETPEQEMEETPCRELEEEEEWGSGSEDASKK DGAVESISVPDMVDKNLTCPEEEDTVKVVGIPGCQTCRYLLVRSLQTFSQAWFTCRRCYRGNLVSIHNFN INYRIQCSVSALNQGQVWIGGRITGSGRCRRFQWVDGSRWNFAYWAAHQPWSRGGHCVALCTRGGYWRRA HCLRRLPFICSY

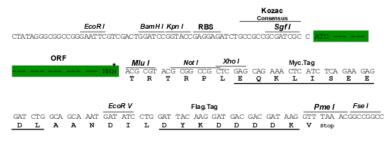
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6050 f09.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001302926

ORF Size: 666 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 001302926.1, NP 001289855.1

RefSeq Size: 1427 bp RefSeq ORF: 669 bp Locus ID: 5553

UniProt ID: P13727
Cytogenetics: 11q12.1

Protein Families: Secreted Protein

Protein Pathways: Asthma

MW: 25.2 kDa

Gene Summary: The protein encoded by this gene is the predominant constituent of the crystalline core of the

eosinophil granule. High levels of the proform of this protein are also present in placenta and pregnancy serum, where it exists as a complex with several other proteins including

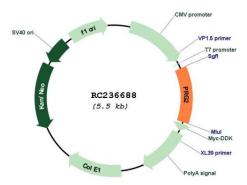
pregnancy-associated plasma protein A (PAPPA), angiotensinogen (AGT), and C3dg. This protein may be involved in antiparasitic defense mechanisms as a cytotoxin and

helminthotoxin, and in immune hypersensitivity reactions. The encoded protein contains a peptide that displays potent antimicrobial activity against Gram-positive bacteria, Gram-negative bacteria, and fungi. It is directly implicated in epithelial cell damage, exfoliation, and bronchospasm in allergic diseases. Alternatively spliced transcript variants encoding different

isoforms have been found for this gene. [provided by RefSeq, Nov 2014]



Product images:



Circular map for RC236688