

Product datasheet for **SC331977**

Major Basic Protein (PRG2) (NM_001243245) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Major Basic Protein (PRG2) (NM_001243245) Human Untagged Clone
Tag: Tag Free
Symbol: Major Basic Protein
Synonyms: BMPG; MBP; MBP1; proMBP
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC331977 representing NM_001243245.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGAAACTCCCCTTACTTCTGGCTCTTCTATTTGGGGCAGTTTCTGCTCTTCATCTAAGGTCTGAGACT
TCCACCTTTGAGACCCCTTTGGGTGCTAAGACGCTGCCTGAGGATGAGGAGACACCAGAGCAGGAGATG
GAGGAGACCCCTTGCAGGGAGCTGGAGGAAGAGGAGGAGTGGGGCTCTGGAAGTGAAGATGCCTCCAAG
AAAGATGGGGCTGTTGAGTCTATCTCAGTGCCAGATATGGTGGACAAAAACCTTACGTGTCCTGAGGAA
GAGGACACAGTAAAAGTGGTGGGCATCCCTGGGTGCCAGACCTGCCGCTACCTCTGTTTACTTGCCGG
AGGTGCTACAGGGGCAACCTGGTTTCCATCCACAACCTTCAATATTAATTATCGAATCCAGTGTTCGTG
AGCGCGCTCAACCAGGGTCAAGTCTGGATTGGAGGCAGGATCACAGGCTCGGGTCGCTGCAGACGCTTT
CAGTGGGTGACGGCAGCCGCTGGAACCTTTCGTACTGGGCTGCTCACCAGCCCTGGTCCCGCGGTGGT
CACTGCGTGGCCCTGTGTACCCGAGGAGGCCACTGGCGTCGAGCCCACTGCCTCAGAAGACTTCTTTTC
ATCTGTTCTACTGA
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Restriction Sites: Sgfl-Mlul
ACCN: NM_001243245
Insert Size: 636 bp
OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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).



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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_001243245.1](#)

RefSeq Size: 841 bp

RefSeq ORF: 636 bp

Locus ID: 5553

UniProt ID: [P13727](#)

Cytogenetics: 11q12.1

Protein Families: Secreted Protein

Protein Pathways: Asthma

MW: 23.9 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]

Transcript Variant: This variant (2) uses an alternate in-frame donor splice site at an internal coding exon compared to variant 1. This results in a shorter isoform (2) missing a 11 aa protein segment compared to isoform 1.