

Product datasheet for TR310185

OriGene Technologies, Inc.

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Major Basic Protein (PRG2) Human shRNA Plasmid Kit (Locus ID 5553)

Product data:

Product Type: shRNA Plasmids

Product Name: Major Basic Protein (PRG2) Human shRNA Plasmid Kit (Locus ID 5553)

Locus ID: 5553

Synonyms: BMPG; MBP; MBP1; proMBP

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: PRG2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5553). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001243245, NM 001302926, NM 001302927, NM 002728, NM 002728.1, NM 002728.2,

NM 002728.3, NM 002728.4, NM 002728.5, NM 001243245.1, NM 001243245.2, NM 001302926.1, NM 001302927.1, BC005929, BC005929.1, NM 002728.6

UniProt ID: P13727

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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.





Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).