

Product datasheet for TR310114

OriGene Technologies, Inc.

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Proteasome beta 1 (PSMB1) Human shRNA Plasmid Kit (Locus ID 5689)

Product data:

Product Type: shRNA Plasmids

Product Name: Proteasome beta 1 (PSMB1) Human shRNA Plasmid Kit (Locus ID 5689)

Locus ID: 5689

Synonyms: HC5; PMSB1; PSC5

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Furomycin

Format: Retroviral plasmids

Components: PSMB1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5689). 5µg purified plasmid DNA per construct

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

RefSeq: NM 002793, NM 002793.1, NM 002793.2, NM 002793.3, BC000508, BC000508.2, BC020807,

NM 002793.4

UniProt ID: P20618

Summary: The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S

core structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. This gene is tightly linked to the TBP (TATA-binding protein) gene in human and in mouse, and is transcribed in the opposite orientation in both species.

[provided by RefSeq, Jul 2008]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







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).