

## **Product datasheet for TR315507**

## OriGene Technologies, Inc.

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## Proteasome 20S alpha 5 (PSMA5) Human shRNA Plasmid Kit (Locus ID 5686)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Proteasome 20S alpha 5 (PSMA5) Human shRNA Plasmid Kit (Locus ID 5686)

Locus ID: 5686

Synonyms: PSC5; ZETA

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: PSMA5 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5686). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001199772, NM 001199773, NM 001199774, NM 002790, NM 002790.1, NM 002790.2,

NM 002790.3, NM 001199772.1, NM 001199773.1, NM 001199774.1, BC103751, BC018605,

BC102018, BC102019, BC102020, BM793388, NM 001199772.2, NM 002790.4,

NM 001199774.2, NM 001199773.2

UniProt ID: P28066

**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 peptidase T1A family, that is a 20S core alpha subunit. Multiple alternatively spliced transcript variants encoding two distinct isoforms have been

found for this gene. [provided by RefSeq, Dec 2010]

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).