

## **Product datasheet for SC331361**

## OriGene Technologies, Inc.

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## Proteasome subunit beta type 2 (PSMB2) (NM 001199779) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Proteasome subunit beta type 2 (PSMB2) (NM\_001199779) Human Untagged Clone

Tag: Tag Free

**Symbol:** Proteasome subunit beta type 2

Synonyms: HC7-I

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC331361 representing NM\_001199779.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GGCATCCATGACCTGGATAACATTTCCTTCCCCAAACAGGGCTCCTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001199779

**Insert Size:** 531 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).





## **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:** <u>NM 001199779.1</u>

RefSeq Size: 4391 bp
RefSeq ORF: 531 bp
Locus ID: 5690
Cytogenetics: 1p34.3

**Protein Families:** Druggable Genome, Protease

Protein Pathways: Proteasome MW: 20.2 kDa

**Gene 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. Multiple alternatively spliced transcript variants encoding

distinct isoforms have been found for this gene. [provided by RefSeq, Dec 2010]

Transcript Variant: This variant (2) lacks an in-frame segment in the 5' region, as compared to variant 1. The resulting isoform (2) lacks an internal segment in the N-terminus, as compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.