

## **Product datasheet for PH302431**

## OriGene Technologies, Inc.

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## PSME2 (NM 002818) Human Mass Spec Standard

**Product data:** 

**Product Type:** Mass Spec Standards

**Description:** PSME2 MS Standard C13 and N15-labeled recombinant protein (NP\_002809)

Species: Human **HEK293 Expression Host:** 

**Expression cDNA Clone** or AA Sequence:

RC202431

Predicted MW: 27.4 kDa

>RC202431 protein sequence **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

MAKPCGVRLSGEARKQVEVFRONLFQEAEEFLYRFLPQKIIYLNQLLQEDSLNVADLTSLRAPLDIPIPD PPPKDDEMETDKQEKKEVPKCGFLPGNEKVLSLLALVKPEVWTLKEKCILVITWIQHLIPKIEDGNDFGV AIQEKVLERVNAVKTKVEAFQTTISKYFSERGDAVAKASKETHVMDYRALVHERDEAAYGELRAMVLDLR

**AFYAELYHIISSNLEKIVNPKGEEKPSMY** 

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Labeling Method:** Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 002809

RefSeq Size: 829 RefSeq ORF: 717

Synonyms: PA28B; PA28beta; REGbeta

Locus ID: 5721

UniProt ID: Q9UL46, Q86SZ7





Cytogenetics:

14q12

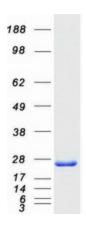
Summary:

The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core 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. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase 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. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been identified. This gene encodes the beta subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three beta and three alpha subunits combine to form a heterohexameric ring. Six pseudogenes have been identified on chromosomes 4, 5, 8, 10 and 13. [provided by RefSeq, Jul 2008]

**Protein Pathways:** 

Antigen processing and presentation, Proteasome

## **Product images:**



Coomassie blue staining of purified PSME2 protein (Cat# [TP302431]). The protein was produced from HEK293T cells transfected with PSME2 cDNA clone (Cat# [RC202431]) using MegaTran 2.0 (Cat# [TT210002]).