

## Product datasheet for TP302431

### PSME2 (NM\_002818) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human proteasome (prosome, macropain) activator subunit 2 (PA28 beta) (PSME2), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC202431 protein sequence Red=Cloning site Green=Tags(s)

MAKPCGVRLSGEARKQVEVFRQNLFQEAEEFLYRFLPQKIIYLNQLLQEDSLNVADLTSLRAPLDIIPD  
PPPKDDEMETDKQEKKEVPKCGFLPGNEKVLSELLALVKPEVWTLKEKCILVITWIQHLIPKIEDGNDFGV  
AIQEKVLERVNAVTKVEAFQTTISKYFSERGDAAVAKASKETHVMDYRALVHERDEAAAYGELRAMVLDLR  
AFYAELYHIISSNLEKIVNPKGEEKPSMY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	27.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_002809</a></u>
Locus ID:	5721



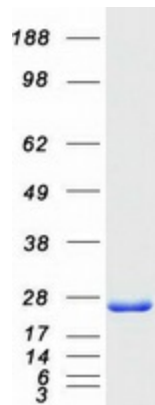
[View online »](#)

UniProt ID:	<a href="#">Q9UL46</a>
RefSeq Size:	829
Cytogenetics:	14q12
RefSeq ORF:	717
Synonyms:	PA28B; PA28beta; REGbeta

**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]).