# PSMB7 (Human) Recombinant Protein (Q01)

Catalog # H00005695-Q01 Size 25 ug, 10 ug

### Applications



Specification	
Product Description	Human PSMB7 partial ORF ( AAH00509, 188 a.a 277 a.a.) recombinant protein with GST-tag at N -terminal.
Sequence	DMEEEEAKNLVSEAIAAGIFNDLGSGSNIDLCVISKNKLDFLRPYTVPNKKGTRLGRYRCEKGTTA VLTEKITPLEIEVLEETVQTMDTS
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	35.64
Interspecies Antigen Sequence	Mouse (94); Rat (92)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



# Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PSMB7	
Entrez GenelD	<u>5695</u>
GeneBank Accession#	<u>BC000509</u>
Protein Accession#	<u>AAH00509</u>
Gene Name	PSMB7
Gene Alias	Z
Gene Description	proteasome (prosome, macropain) subunit, beta type, 7
Omim ID	<u>604030</u>
Gene Ontology	Hyperlink
Gene Summary	The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S cor e structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are co mposed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distri buted 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 membe r of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit in the proteasome. Expression of this catalytic subunit is downregulated by gamma interferon and pr oteolytic processing is required to generate a mature subunit. This subunit is not present in the im munoproteasome and is replaced by catalytic subunit 2i (proteasome beta 10 subunit). [provided by RefSeq
Other Designations	OTTHUMP0000022798 macropain chain Z multicatalytic endopeptidase complex chain Z protea some beta 7 subunit proteasome catalytic subunit 2 proteasome subunit Z proteasome subunit al pha proteasome subunit beta 7



## Pathway

• Proteasome

#### Disease

- Kidney Failure
- Tobacco Use Disorder