

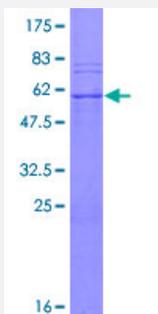
Full-Length

PSMB7 (Human) Recombinant Protein (P01)

Catalog # H00005695-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human PSMB7 full-length ORF (NP_002790.1, 1 a.a. - 277 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAAVSVYAPPVGGFSDNCRNAVLEADFAKRGYKLPKVRKTGTTIAGVVYKDGMLGADTRATE
GMVVADKNCISKIHFISPNYCCGAGTAADTDMTQLISSNLELHSLSTGRLPRVVTANRMLKQMLF
RYQGYGAALVLGGVDVTGPHLYSIYPHGSTDKLPYVTMGSGSLAAMAVFEDKFRPDMEEEEAKN
LVSEAIAAGIFNDLGSGSNIDLCVISKNKLDFLRPYTPVNNKGTTRLGRYRCEKGTTAVLTEKITPLEIE
VLEETVQTMDS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

56.4

Interspecies Antigen Sequence

Mouse (96); Rat (95)

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-HCl, 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 GeneID [5695](#)

GeneBank Accession# [NM_002799.2](#)

Protein Accession# [NP_002790.1](#)

Gene Name PSMB7

Gene Alias Z

Gene Description proteasome (prosome, macropain) subunit, beta type, 7

Omim ID [604030](#)

Gene Ontology [Hyperlink](#)

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 in the proteasome. Expression of this catalytic subunit is downregulated by gamma interferon and proteolytic processing is required to generate a mature subunit. This subunit is not present in the immunoproteasome and is replaced by catalytic subunit 2i (proteasome beta 10 subunit). [provided by RefSeq]

Other Designations

OTTHUMP00000022798|macropain chain Z|multicatalytic endopeptidase complex chain Z|proteasome beta 7 subunit|proteasome catalytic subunit 2|proteasome subunit Z|proteasome subunit alpha|proteasome subunit beta 7

Pathway

- [Proteasome](#)

Disease

- [Kidney Failure](#)
- [Tobacco Use Disorder](#)