

AR39154PU-S

Human PSMB10 (40-273, His-tag) - Purified

Alternate names:

EC=3.4.25.1, MECL1, Macropain subunit MECL-1, Multicatalytic endopeptidase complex subunit MECL-1, PSMB10, Proteasome MECL-1, Proteasome subunit beta type-10, Proteasome subunit beta-2i

Quantity:

10 µg

Concentration:

0.25 mg/ml (determined by Bradford assay)

Background:

PSMB10 is a member of the proteasome B-type family, also known as the T1B family, which is a 20S core beta subunit. 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. Expression of the PSMB10 gene is induced by gamma interferon, and PSMB10 replaces catalytic subunit 2 (proteasome beta 7 subunit) in the immunoproteasome.

Uniprot ID:

[P40306](#)

NCBI:

[NP_002792.1](#)

GenID:

[5699](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90%

Buffer System: 20mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.1M NaCl

Description:

Recombinant human PSMB10 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MTTIAGLVFQ DGVILGADTR ATNDSVVADK SCEKIHFIAP
KIYCCGAGVA ADAEMTTRMV ASKMELHALS TGREPRVATV TRILRQTLFR YQGHVGASLI
VGGVDLTGPQ LYGVPHGYSY SRLPFTALGS GQDAALAVLE DRFQPNMTLE AAQGLLVEAV
TAGILGDLGS GGNVDACVIT KTGAKLLRTL SSPTEPVKRS GRYHFVP GTT AVLTQTVKPL
TLELVEETVQ AMEVE

Molecular weight: 26.9 kDa (255aa), confirmed by MALDI-TOF

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

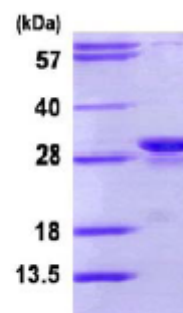
General Readings:

Foss G.S., et al. (1998) Biochim. Biophys. Acta. 1402:17-28.

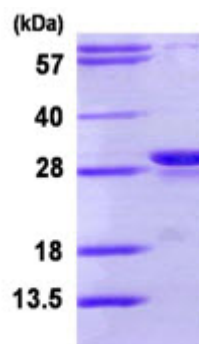
Hisamatsu H., et al. (1996) J. Exp. Med. 183:1807-1816.

Pictures:

Recombinant human PSMB10, 40-273aa,
His-tagged



15% SDS-PAGE (3ug)



15% SDS-PAGE (3ug)