

Recombinant human PSMB10/MECL1 protein

Catalog Number: ATGP1212

PRODUCT INFORMATION

Expression system

E.coli

Domain

40-273aa

UniProt No.

P40306

NCBI Accession No.

NP_002792.1

Alternative Names

Proteasome subunit beta type-10, LMP10, MECL1

PRODUCT SPECIFICATION

Molecular Weight

26.9 kDa (255aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 40% glycerol, 0.1M NaCl

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

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

Recombinant human PSMB10/MECL1 protein

Catalog Number: ATGP1212

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

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH M>TTIAGLVFQ DGVLGADTR ATNDSVVADK SCEKIHFIAP KIYCCGAGVA
ADAEMTTRMV ASKMELHALS TGREPRVATV TRILRQTLFR YQGHVGASLI VGGVDLTGPQ LYGVHPHGSY SRLPFTALGS
GQDAALAVLE DRFQPNMTLE AAQGLLVEAV TAGILGDLGS GGNVDACVIT KTGAKLLRTL SSPTEPVKRS GRYHFVPGTT
AVLTQTVKPL TLELVEETVQ AMEVE

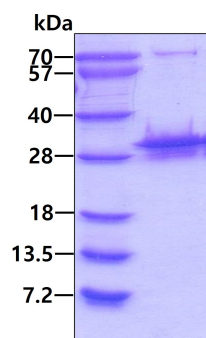
General References

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

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

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.