PRODUCT INFORMATION

Expression system E.coli

Domain 27-185aa

UniProt No. P20645

NCBI Accession No. NP_002346

Alternative Names

Cation-dependent mannose-6-phosphate receptor isoform 1, CD-MPR, MPR 46, MPR-46, MPR46, SMPR

PRODUCT SPECIFICATION

Molecular Weight 20.3 kDa (182aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity

> 85% 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

M6PR is a member of the P-type lectin family. P-type lectins play a critical role in lysosome function through the specific transport of mannose-6-phosphate-containing acid hydrolases from the Golgi complex to lysosomes. This protein functions as a homodimer and requires divalent cations for ligand binding. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. A pseudogene of this gene is located on the long arm of chromosome X. Recombinant human M6PR protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques..



Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>TEEKTCD LVGEKGKESE KELALVKRLK PLFNKSFEST VGQGSDTYIY IFRVCREAGN HTSGAGLVQI NKSNGKETVV GRLNETHIFN GSNWIMLIYK GGDEYDNHCG KEQRRAVVMI SCNRHTLADN FNPVSEERGK VQDCFYLFEM DSSLACSPEI SH

General References

Prabakaran T, Nielsen R., et al. (2012) PLoS One. 2012;7(6):e39975.

DATA

SDS-PAGE



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

