

# Recombinant human GMDS protein

Catalog Number: ATGP1282

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-372aa

### UniProt No.

O60547

### NCBI Accession No.

NP\_001491

### Alternative Names

GDP-mannose 46 dehydratase, GDP-mannose 4,6 dehydratase, GMD, SDR3E1

## PRODUCT SPECIFICATION

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### Molecular Weight

44.1 kDa (392aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 30% glycerol, 0.1M NaCl, 1mM DTT, 0.1mM PMSF

### Purity

> 95% 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

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### Description

GMDS, also known as SDR3E1, belongs to the GDP-mannose 4, 6-dehydratase family. This protein utilizes NADP as a cofactor to catalyze the conversion of GDP-mannose to GDP-4-keto-6-deoxymannose. Mutations in the gene encoding GMDS are involved in resistance to TRAIL (tumor necrosis factor-related apoptosis-inducing ligand) - induced apoptosis. Recombinant human GMDS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

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## Amino acid Sequence

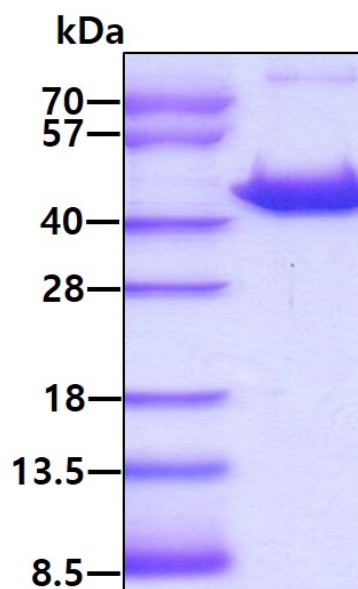
<MGSSHHHHHH SSGLVPRGSH> MAHAPARCPS ARGSGDGEMG KPRNVALITG ITGQDGSYLA EFLEKGYEV  
HGIVRRSSSF NTGRIEHLK NPQAHIEGNM KLHYGDLTDS TCLVKIINEV KPTEIYNLGA QSHVKISFDL AEYTADV DGV  
GTLRLLDAVK TCGLINSVKF YQASTSELYG KVQEIPQKET TPFYRSPYG AAKLYAYWIV VNFREAYNLF AVNGILFNHE  
SPRRGANFVT RKISRSVAKI YLGQLECFSL GNLDKRDWG HAKDYVEAMW LMLQNDEPED FVIATGEVHS VREFVEKSFL  
HIGKTIVWEG KNENEVGRCK ETGKVHVTVD LKYRPTVEVD FLQGDCTKAK QKLNWKPRVA FDELVREMVH ADVELMRTNP  
NA

## General References

Ohyama C. et al. (1998) J Biol Chem. 273: 14582-14587.  
Moriwaki K. et al. (2009) Gastroenterology 137: 188-198.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.