

# Recombinant mouse GAPDH protein

Catalog Number: ATGP3434

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-333aa

### UniProt No.

P16858

### NCBI Accession No.

NP\_032110

### Alternative Names

Glyceraldehyde-3-phosphate dehydrogenase isoform 2, G3PD, GAPD, HEL-S-162eP, Peptidyl-cysteine S-nitrosylase GAPDH

## PRODUCT SPECIFICATION

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### Molecular Weight

38.2 kDa (356aa) confirmed by MALDI-TOF

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol, 1mM DTT

### Purity

> 95% by SDS-PAGE

### Biological Activity

Specific activity is > 40unit/mg, and is defined as the amount of enzyme that convert 1.0 umole of glyceraldehyde-3-phosphate to 1,3-Bisphosphoglycerate per minute at pH 8.5 at 37C.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### 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

Gapdh, also known as glyceraldehyde 3-phosphate dehydrogenase, is an enzyme of 37kDa that catalyzes the sixth step of glycolysis and thus serves to break down glucose for energy and carbon molecules. In addition to

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this long established metabolic function, Gapdh has recently been implicated in several non-metabolic processes, including transcription activation, initiation of apoptosis, ER to Golgi vesicle shuttling, and fast axonal, or axoplasmic transport. Recombinant mouse Gapdh, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

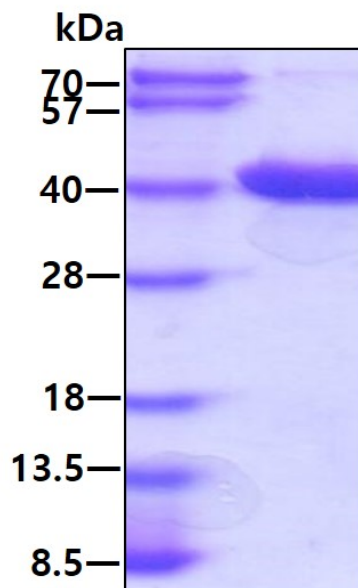
<MGSSHHHHHH SSGLVPRGSH MGS>MVKVGVN GFGRIGRLVT RAAICSGKVE IVAINDPFID LNYMVYMFQY  
DSTHGKFNGT VKAENGLVI NGKPITIFQE RDPTNIKWGE AGAEYVVEST GVFTTMEKAG AHLKGGAKRV IISAPSADAP  
MFVMGVNHEK YDNSLKIVSN ASCTTNCLAP LAKVIHDNFG IVEGLMTTVH AITATQKTVD GPSGKLWRDG RGAAQNIIPA  
STGAAKAVGK VIPELNGKLT GMAFRVPTPN VSVVDLTCRL EKPAKYDDIK KVKQASEGP LKGILGYTED QVVSCDFNSN  
SHSSTFDAGA GIALNDNFVK LISWYDNEYG YSNRVVDLMA YMASKE

## General References

Tarze A, Deniaud A, et al. (2007). *Oncogene*. 26(18):2606-20.  
Tisdale EJ, et al. (2007). *Traffic*. 8(6):733-41.

## DATA

### SDS-PAGE



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