

# Human GAPDH Protein (His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 10094-H07E

## General Information

### Gene Name Synonym:

G3PD; GAPD; HEL-S-162eP

### Protein Construction:

A DNA sequence encoding the human GAPDH (P04406) (Met 1-Glu 335) was expressed, with a polyhistidine tag at the N-terminus.

**Source:** Human

**Expression Host:** E. coli

## QC Testing

**Purity:** > 93 % as determined by SDS-PAGE

### Endotoxin:

Please contact us for more information.

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Met

### Molecular Mass:

The recombinant human GAPDH comprises 346 amino acids and migrates as an approximately 38 kDa band in SDS-PAGE under reducing conditions as predicted.

### Formulation:

Lyophilized from sterile 50mM Tris, 30% glycerol, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

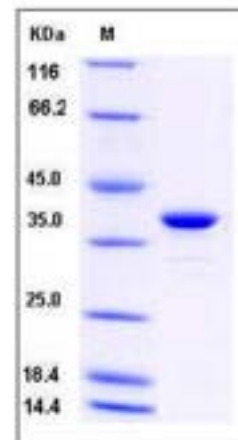
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Glyceraldehyde 3-phosphate dehydrogenase (GAPDH or G3PDH) is an enzyme of about 37kDa that is considered as a cellular enzyme involved in glycolysis. It catalyzes the sixth step of glycolysis. Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) is a pleiotropic enzyme that is overexpressed in apoptosis and in several human chronic pathologies. Its role as a mediator for cell death has also been highlighted. A recent report suggests that GAPDH may be genetically associated with late-onset of Alzheimer's disease. Besides, deprenyl, which has originally been used as a monoamine oxidase inhibitor for Parkinson's disease, binds to GAPDH and displays neuroprotective actions.

## References

- 1.Hara MR, *et al.* (2006) Neuroprotection by pharmacologic blockade of the GAPDH death cascade. PNA. 103 (10): 3887-9.
- 2.Hara MR, *et al.* (2006) GAPDH as a sensor of NO stress. Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease. 1762 (5): 502-9.
- 3.Tarze A, *et al.* (2007) GAPDH, a novel regulator of the pro-apoptotic mitochondrial membrane permeabilizationGAPDH and apoptosis. Oncogene. 26: 2606-20.

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For US Customer: Fax: 267-657-0217 ● Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 ● Tel:+86-400-890-9989 ● <http://www.sinobiological.com>