Mouse GAPDH Protein (His Tag)

Catalog Number: **51221-M07E**

General Information

Gene Name Synonym:

Gapd

Protein Construction:

A DNA sequence encoding the mouse GAPDH (P16858) (Met1-Glu333) was expressed with a polyhistidine tag at the N-terminus.

Source: Mouse

Expression Host: E. coli

QC Testing

Purity: > 85 % 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 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant mouse GAPDH consists of 349 amino acids and predicts a molecular mass of 37.9 KDa. It migrates as an approximately 38 KDa band in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile 50 mM Tris, 200 mM Arg, 10% gLycerol.

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:

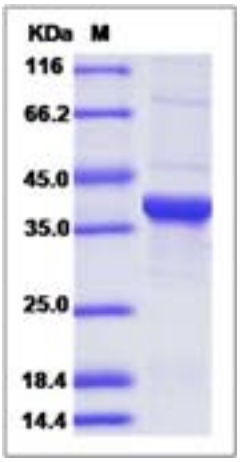
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 consisdered as a cellular enzyme involved in glycolysis. It catelyzes 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.