**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**