

**GAPDH, 1-335aa, Human, E.coli (Bioactivity Validated)**

**Cat.NO.: TP02197**

3th Edition

**Synonyms:** Glyceraldehyde-3-phosphate dehydrogenase, G3PD, GAPD.

**Description:** Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) is a catalytic enzyme commonly known to be involved in glycolysis. The enzyme exists as a tetramer composed of 36-kDa subunits and has various intracellular functions. GAPDH catalyzes the reversible reduction of 1,3-bisphosphoglycerate to glyceraldehyde 3-phosphophate in the presence of NADPH. Besides functioning as a glycolytic enzyme in cytoplasm, evidence suggests that mammalian GAPDH is also involved in a great number of intracellular processes such as membrane fusion, microtubule bundling, phosphotransferase activity, nuclear RNA export, DNA replication and DNA repair. Recombinant GAPDH protein was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 1 mM EDTA, 20% glycerol

**Molecular Weight:** 36kDa (335aa), confirmed by MALDI-TOF

**Sequences:**

MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDLNYMVYMFQYDSTHGKFHGTVKAENGKLVINGNPITIF  
QERDPSKIKWGDAGAEYVVESTGVFTTMEKAGAHQLGGAKRVIISAPSADAPMFVMGVNHEKYDNSLKIISNASCT  
TNCLAPLAKVIHDNFGIVEGLMTTVHAITATQKTVDGPSGKLWRDGRGALQNIIPASTGAAKAVGKVIPELNGKLTGM  
AFRVPTANVSVDLTCRLEKPAKYDDIKKVVKQASEGPLKGILGYTEHQVVSSDFNSDTHSSTFDAGAGIALNDHFV  
KLISWYDNEFGYSNRVVDLMAHMASKE

**Purity:** > 95% by HPLC

**Concentration:** 1 mg/ml (determined by Bradford assay)

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.