

## Product datasheet for **TP302309M**

### GAPDH (NM\_002046) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glyceraldehyde-3-phosphate dehydrogenase (GAPDH), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC202309 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	 MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDLNYMVYMFQYDSTHGKFHGTVKAENGLVIN GNPITIFQERDPSKIKWGDAGA EYVVESTGVFTTMEKAGAHLQGGAKRVIISAPSADAPMFVMGVNHEKY DNSLKIIISNASCCTNCLAPLAKVIHDNFGIVEGLMTTVHAIATATQKTVDGPSGKLWRDGRGALQNIIPAS TGAAKAVGKVIPELNGKLTGMAFRVPTANVSVDLTCRLEKPAKYDDIKKVVKQASEGPLKGILGYTEHQ VVSSDFNSDTHSSTFDAGAGIALNDHFVKLISWYDNEFGYSNRVVDLMAHMASKE  <b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-Myc/DDK
Predicted MW:	35.9 kDa
Concentration:	>0.1 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_002037</a></u>
Locus ID:	2597



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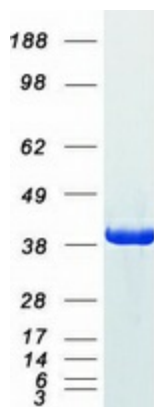
UniProt ID: [P04406, V9HVZ4](#)  
RefSeq Size: 1421  
Cytogenetics: 12p13.31  
RefSeq ORF: 1005  
Synonyms: G3PD; GAPD; HEL-S-162eP

**Summary:** This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against *E. coli*, *P. aeruginosa*, and *C. albicans*. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

**Protein Families:** ES Cell Differentiation/IPS

**Protein Pathways:** Alzheimer's disease, Glycolysis / Gluconeogenesis, Metabolic pathways

### Product images:



Coomassie blue staining of purified GAPDH protein (Cat# [TP302309]). The protein was produced from HEK293T cells transfected with GAPDH cDNA clone (Cat# [RC202309]) using MegaTran 2.0 (Cat# [TT210002]).