

Product datasheet for TP302309L

OriGene Technologies, Inc.

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GAPDH (NM 002046) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human glyceraldehyde-3-phosphate dehydrogenase (GAPDH), 1 mg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC202309 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MGKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDLNYMVYMFQYDSTHGKFHGTVKAENGKLVIN GNPITIFQERDPSKIKWGDAGAEYVVESTGVFTTMEKAGAHLQGGAKRVIISAPSADAPMFVMGVNHEKY DNSLKIISNASCTTNCLAPLAKVIHDNFGIVEGLMTTVHAITATQKTVDGPSGKLWRDGRGALQNIIPAS TGAAKAVGKVIPELNGKLTGMAFRVPTANVSVVDLTCRLEKPAKYDDIKKVVKQASEGPLKGILGYTEHQ

VVSSDFNSDTHSSTFDAGAGIALNDHFVKLISWYDNEFGYSNRVVDLMAHMASKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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: NP 002037

Locus ID: 2597



GAPDH (NM_002046) Human Recombinant Protein - TP302309L

UniProt ID: <u>P04406</u>, <u>V9HVZ4</u>

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

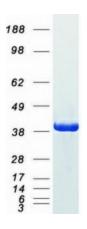
family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate 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]).