

Product datasheet for **AR09029PU-N**

GAPDH (1-335) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	GAPDH (1-335) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGKVKVGVNG FGRIGRLVTR AAFNSGKVDI VAINDPFIDL NYMVYMFQYD STHGKFHGTV KAENGLVIN GNPITIFQER DPSKIKWGDA GA EYVVESTG VFTTMEKAGA HLQGGAKRVI ISAPSADAPM FVMGVNHEKY DNSLKIISNA SCTTNCLAPL AKVIHDNFGI VEGLMTTVHA ITATQKTVDG PSGKLWRDGR GALQNIIPAS TGA AKAVGKV IPELNGKLTG MAFRVPTANV SVVDLTCRLE KPAKYDDIKK VVKQASEGPL KGILGYTEHQ VSSDFNSDT HSSTFDAGAG IALNDHFVKL ISWYDNEFGY SNRVV DLM AH MASKE
Predicted MW:	36 kDa
Concentration:	lot specific
Purity:	>95% pure by SDS-PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris pH 8.0, 1 mM EDTA, 1 mM DTT, 20% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant GAPDH protein was expressed in E.coli and purified by using conventional chromatography techniques.
Note:	NCBI Accession No.: NP_002037
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001243728
Locus ID:	2597
UniProt ID:	P04406
Cytogenetics:	12p13.31
Synonyms:	G3PD; GAPD; HEL-S-162eP



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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: