



Human Glyceraldehyde-3-Phosphate Dehydrogenase (DAG176)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Species	Human
Conjugate	Unconjugated
Applications	ELISA
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduct

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. 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.

Keywords

GAPDH; glyceraldehyde-3-phosphate dehydrogenase; GAPD; aging-associated gene 9 protein; peptidyl-cysteine S-nitrosylase GAPDH; G3PD; MGC88685;

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