

Product Specification Sheet

**Glyceraldehyde-3-phosphate dehydrogenase, G3PDH/GAPD/G3PD**

Cat. # G3PDH12-N-25

Purified human heart G3PDH protein

**SIZE:** 25 ug

Glyceraldehyde-3-phosphate dehydrogenase, G3PDH/GAPD/G3PD (EC 1.2.1.12) 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). G3PDH is a cytosolic enzyme. It is thought to be a tetramer of identical chains ~36 kda. G3PDH (mouse/rat/Human 333; human 335-aa, chromosome 12p13.31-p13.1). The enzyme is present in such widely separated forms as man, lobster, and E. coli. Its rate of evolutionary change is one of the slowest known.

**Source of Antigen and Antibodies**

G3PDH protein is purified (>98%) from human heart. All human derived material has been tested negative for HIV, HCV, and HbSAg. Nevertheless, all precautions should be taken and samples be treated as potentially hazardous. It is supplied in 80% Ammonium sulfate, containing traces of HEPES, EDTA and DTT at 1 mg/ml (see lot specific concn on the vial).

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting**

**ELISA:** Control antigen can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

**General References:** (1) Tso JY et al (1985) Nucl. Acid Res. 13, 2485-2502; Hanuer A et al (1984) EMBO J. 3, 2627-2633; Arcari P et al (1984) Nucl. Acid. Res. 12, 9179-9189; Meyer-Sigler K et al (1991) PNAS 88, 8460-8464; Tokunaga K et al (1987) Cancer Res. 47, 5616-5619; Allen RW et al (1987) JBC 262, 649-653

**Related material available from ADI**

AntibodyType	Catalog#	ProdDescription
	G3PDH11-C	Purified Glyceraldehyde-3-Phosphate Dehydrogenase G3PDH (rabbit) protein control for WB
Mouse-Mono	G3PDH11-M	Monoclonal Anti-Glyceraldehyde-3-Phosphate Dehydrogenase GAPDH (rabbit) IgG
	G3PDH12-N-25	Human heart Glyceraldehyde-3-Phosphate Dehydrogenase GAPDH purified protein control for WB
Goat-Poly	G3PDH12-S	Anti-Rabbit muscle Glyceraldehyde-3-Phosphate Dehydrogenase G3PDH IgG #2
Rabbit-Poly	G3PDH13-A	Anti-Human Glyceraldehyde-3-Phosphate Dehydrogenase G3PDH IgG, aff pure
	G3PDH13-C	Human Glyceraldehyde-3-Phosphate Dehydrogenase G3PDH/GAPDH protein control for WB
Mouse-Mono	G3PDH14-M	Monoclonal Anti-human Glyceraldehyde-3-Phosphate Dehydrogenase GAPDH IgG, aff pure

Western blot recycling kit

Antigen-antibody pens for western

*\*This product is for In vitro research use only.*

G3PDH12-N-25

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