

Product Specification Sheet

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

- Cat. # G3PDH13-A Rabbit Anti-Anti-Human G3PDH peptide IgG, aff pure **SIZE:** 100 ug
- Cat. # G3PDH13-C Human G3PDH protein +ve Control for WB **SIZE:** 100 ul

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/rabbit 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

Antigen	a 16-amino acid peptide from near the amino-terminus of human GAPDH (Genbank accession No. P04406).
Ab Host/type	Rabbit, polyclonal IgG, aff pure, (cat # G3PDH13-A) in PBS, pH 7.5 containing 0.05% azide
2-ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

HeLa cell lysate is tested and prepared as WB positive control for ant-human G3PDH protein # G3PDH13-A. **G3PDH (cat # G3PDH13-C) protein for WB +ve control**, is formulated in SDS-PAGE sample buffer (reduced). This preparation is biologically inactive. It is not suitable for ELISA or other applications where native protein is required. It is supplied in 100 ul/vial. For WB, heat once and load 10 ul/lane and visualize with appropriate antibodies (cat # G3PDH13-A or other antibodies). This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Store frozen in suitable aliquots. Do not freeze, thaw, or heat repeatedly.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

- 100 ug/100ul solution lyophilized powder
- Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

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 (1-5 ug/ml for affinity pure IgG using ECL technique). ~38 Kda

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).

Specificity & Cross-reactivity

G3PDH13-A reacts with G3PDH from mouse, rat, and human. It may crossreact with the G3PDH from other species. Antibody crossreactivity in various species is not confirmed. Purified G3PDH (cat # G3PDH13-C) can be used as +ve control for western.

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

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

Related material available from ADI

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Antigen-antibody pens for western

G3PDH13-A-C

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