

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**

<b>Antigen</b>	a 16-amino acid peptide from near the amino-terminus of human GAPDH (Genbank accession No. P04406).
<b>Ab Host/type</b>	Rabbit, polyclonal IgG, aff pure, (cat # <b>G3PDH13-A</b> ) in PBS, pH 7.5 containing 0.05% azide
<b>2-ab</b>	<b>Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates also available)</b>
<b>-ve control IgG</b>	# 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**

Western blot recycling kit

Antigen-antibody pens for western

G3PDH13-A-C

80630A

**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi - 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)