

Product Specification Sheet

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

Cat. # G3PDH11-M Mouse Monoclonal Anti-Rabbit G3PDH IgG (aff pure) **SIZE:** 100 ug

Cat. # G3PDH11-C Rabbit G3PDH purified 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>	Rabbit Muscle purified G3PDH protein
<b>Ab Host/type</b>	Mouse, Monoclonal, IgG2b, Aff pure IgG (cat # G3PDH11-M) in PBS, pH 7.5 containing 0.05% azide,
<b>2-ab</b>	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
<b>-ve control IgG</b>	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Purified Rabbit muscle G3PDH (cat # G3PDH11-C) protein for WB +ve control**, is formulated in SDS-PAGE sample buffer (reduced). This preparation is not 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 # G3PDH12-A or G3PDH11-M). 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                      50 ug/50 ul lyophilized powder

Buffer: PBS, pH 7.4, 0.05% sodium azide

**Reconstitute powder** in PBS at 1 mg/ml

**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** (3-6 ug/ml for affinity pure IgG using ECL technique).

**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).

**Histochemistry & Immunofluorescence:** 1:300-1:500 in PBS-BSA 10 mg/ml. 4% PFA, with 0.02% PBS-Triton X-100; 3min RT..

**Specificity & Cross-reactivity**

G3PDH11-M reacts with G3PDH from fish, frog, chicken, rabbits, mouse, and human skeletal muscle. It does not react with G3PDH from E. coli. Antibody crossreactivity in other species has not been studied. Purified G3PDH (cat # G3PDH11-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

G3PDH11-M-C                      71213S

**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)