

Product Specification Sheet

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

Cat. # G3PDH14-M	Mouse Monoclonal Anti-Human G3PDH protein, ascites	SIZE: 100 ug
Cat. # G3PDH13-C	Human G3PDH +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/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

Antigen	Human purified G3PDH protein
Ab Host/type	Mouse, Monoclonal, IgG1, Aff pure IgG (cat # G3PDH14-M) in PBS, pH 7.5 containing 0.05% azide,
2-ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
-ve control IgG	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

HeLa cell lysate is tested and prepared as WB positive control for anti-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 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

G3PDH14-M reacts with G3PDH from human, mouse, and rat tissues. Antibody crossreactivity in other species has not been studied. 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

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Antigen-antibody pens for western

G3PDH14-M 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 Website: www.lifetechindia.com