

GAPDH polyclonal antibody

Version: 1.1

Catalog No.: SWSPA002

Background: Glyceraldehyde-3-phosphate dehydrogenase (GAPDH), also called uracil DNA glycosylase, catalyzes the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide, an important energy yielding step in carbohydrate metabolism. GAPDH is a 37KDa glycolytic enzyme constitutively and stably expressed in almost all tissues.

Proteins such as GAPDH involved in maintenance of basic cellular function are often referred to as housekeeping protein that are frequently used as loading controls for western blots and protein normalization.

Description: A highly specific and sensitive rabbit polyclonal antibody against GAPDH.

Source: KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human GAPDH.

Applications: WB 1:1000-2000, ICH 1:500-2000. Optimal dilution has to be determined by the user.

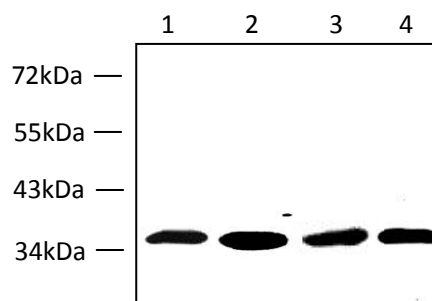
Applicable Species: mouse, rat, human.

Specifications: Each vial contains 0.1 mg IgG in 0.1 ml (1 mg/ml) of PBS pH7.4, 0.5% BSA with 0.05% sodium azide. Antibody was purified by affinity chromatography.

Storage conditions: store at 2-8°C for 3 months, -20°C for 1 year. To avoid freeze-thaw cycles, reconstituted antibody should be aliquoted before freezing for short-term storage (-20°C) or for long-term storage (-80°C).

Note: For research use only, not for use in diagnostic procedures.

Data:



Western blot analysis of GAPDH expression in Rat liver (1), HeLa (2), Sp/20 (3) and NIH/3T3 (4) whole cell lysates

References:

1. Meyer-Siegler, K., et al. 1991. A human nuclear uracil DNA glycosylase is the 37 kDa subunit of GAPDH. *Proc. Natl. Acad. Sci. USA* 88: 8460-8464.
2. Rondinelli, R.H., et al. 1997. Increased GAPDH gene expression in late pathological stage human prostate cancer. *Prostate Cancer Prostatic Dis.* 2: 66-72.
3. Eyschen, J., et al. 1999. Engineered glycolytic GAPDH binds the anti conformation of NAD⁺ nicotinamide but does not experience A-specific hydride transfer. *Arch. Biochem. Biophys.* 364: 219-227.
4. Sirover, M.A. 1999. New insights into an old protein: the functional diversity of mammalian GAPDH. *Biochim. Biophys. Acta* 1432: 159-184.
5. Berry, M.D., et al. 2000. GAPDH and apoptosis. *J. Neurosci. Res.* 60: 150-154.