

### ★ Storage

Store at -20°C. Avoid freeze/thaw cycles.

### ★ Description

Rabbit Polyclonal to glyceraldehyde-3-phosphate dehydrogenase.

### ★ 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 (NAD), an important energy-yielding step in carbohydrate metabolism. While GAPDH has long been recognized as playing an integral role in glycolysis, additional functions of GAPDH include acting as an uracil DNA glycosylase, activating transcription, binding RNA and involvement in nuclear RNA export, DNA replication and DNA repair. Expression of GAPDH is upregulated in liver, lung and prostate cancers. GAPDH translocates to the nucleus during apoptosis. GAPDH complexes with neuronal proteins implicated in human neurodegenerative disorders including the B-Amyloid precursor, Huntington and other triplet repeat neuronal disorder proteins.

### ★ Form / Concentration

Liquid / 1mg/ml

### ★ Isotype

IgG

### ★ Size

100ug

### ★ Host / Clonality

Rabbit / polyclonal

### ★ Storage buffer

PBS with 0.02% sodium azide, 50% glycerol, pH 7.3

### ★ Purity

GAPDH is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of GAPDH of human origin.

### ★ Specificity

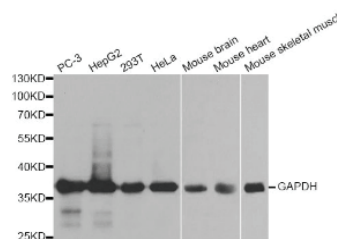
GAPDH is recommended for detection of GAPDH of mouse, rat and human origin. GAPDH is also recommended for detection of GAPDH in additional species, including equine, canine, bovine, porcine, avian, and feline.

### ★ Applications

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

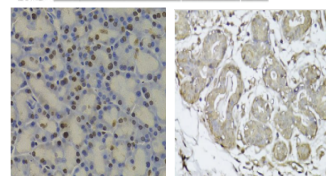
#### Recommended Dilutions:

Application	Starting Dilution
ELISA	1:30-1:3,000
Western Blot	1:1,000-1:10,000
Immunohistochemistry	1:50-1:100
Immunofluorescent	1:20-1:50
Immunoprecipitation	1-2ug per 100-500 of total protein
Other applications	User optimized



Western blot analysis of extracts of various cell lines, using GAPDH antibody (A0039) at 1:1000 dilution.

Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST.



Immunohistochemistry of paraffin-embedded rat pancreas using GAPDH antibody (A0039) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human breast cancer using GAPDH antibody (A0039) at dilution of 1:100 (40x lens).

### ★ Chromosomal Location

Genetic locus: GAPDH (human) mapping to 12p13.31, GAPDHS (human) mapping to 19q13.12; Gapdh (mouse) mapping to 6 F3, Gapdhs (mouse) mapping to 7 B1.

### ★ Related Products

Product Name	Cat No
AffiSelect Alpha-Tubulin Loading Control Antibody	A0050
AffiSelect Beta-actin Loading Control Antibody	A0042
AffiSelect VDAC/Porin Loading Control Antibody	A0033
AffiSelect Cox IV Loading Control Antibody	A0017
West-Ez Blotting Buffer, 3% BSA	W3710
West-Q Chemiluminescent Substrate Kit, Plus	W3651
West-Ez Stripping Buffer	S2100