**GAPDH Monoclonal antibody**

**Catalog Number:** 60004-1-lg

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### Basic Information

- **Catalog Number:** 60004-1-lg
- **Size:** 150μl, Concentration: 1000 μg/ml by Nanodrop
- **Source:** Mouse
- **Isotype:** IgG2b
- **Immunogen Catalog Number:** AG0766
- **GenBank Accession Number:** BC004109
- **GeneID (NCBI):** 2597
- **Full Name:** glyceraldehyde-3-phosphate dehydrogenase
- **Calculated MW:** 36 kDa
- **Observed MW:** 36 kDa
- **Purification Method:** Protein A purification
- **CloneNo.:** 1E6D9
- **Recommended Dilutions:**
  - WB: 1:20000-1:100000
  - IP: 0.5-4.0 μg for IP and 1:2000-1:12000 for WB
  - IF: 1:200-1:2000

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### Applications

- **Tested Applications:** FC, IF, IP, WB, ELISA
- **Cited Applications:** ChIP, CoIP, FC, IF, IHC, IP, WB
- **Species Specificity:** human, mouse, rat, yeast, plant, zebrafish
- **Cited Species:** Arabidopsis, Bombyx mori, bovine, Branchiostoma belcheri, brovine, Caenorhabditis elegans, canine, chicken, CHO cell line, Cynomorium songaricum

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### Background Information

Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) catalyzes the phosphorylation of glyceraldehyde-3-phosphate during glycolysis. GAPDH participates in nuclear events including transcription, binding RNA, RNA transportation, DNA replication, DNA repair and apoptosis. Being stably and constitutively expressed at high levels in most tissues and cells, GAPDH is considered a housekeeping protein. It is widely used as a control for RT-PCR and also loading control in electrophoresis and Western blotting. GAPDH is normally expressed in cellular cytoplasm or membrane, but can occasionally translocate to the nucleus after the addition of post-translational modifications such as S-nitrosylation. This antibody is raised against full length GAPDH of human origin. It can recognize the 36 kDa GAPDH protein in most cells/tissues. In addition, a band below 36 kDa can always be detected as the isoform or spliced product of GAPDH (PMID: 23885286, 23877755, 19368702). Please note that some physiological factors, such as hypoxia and diabetes, increase GAPDH expression in certain cell types. For murine tissue samples, conjugated mouse antibody HRP-60004 and rabbit antibody 10494-1-AP are preferable.

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### Notable Publications

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<thead>
<tr>
<th>Author</th>
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<tr>
<td>Shenli Zhang</td>
<td>34600025</td>
<td>Food Chem Toxicol</td>
<td>WB</td>
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<td>Yanliang Wu</td>
<td>34601083</td>
<td>J Ethnopharmacol</td>
<td>WB</td>
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<tr>
<td>Jiangang Zheng</td>
<td>34587973</td>
<td>BMC Vet Res</td>
<td>WB</td>
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### Storage

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting:** is unnecessary for -20°C storage

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For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Various lysates were subjected to SDS PAGE followed by western blot with 60004-1-Ig (GAPDH antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.

Western blot analysis of GAPDH in various tissues and cell lines using Proteintech antibody 60004-1-Ig at a dilution of 1:10000.

IP & WB of 60004-1-Ig with HeLa Cell

IP result of anti-GAPDH (60004-1-Ig for IP and Detection) with HeLa cell lysate.

arabidopsis, rice, wheat, corn whole plant tissue were subjected to SDS PAGE followed by western blot with 60004-1-Ig (GAPDH Antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of EA treated HeLa cells using 60004-1-Ig(GAPDH antibody) at dilution of 1:50 and Rhodamine-labeled goat anti-mouse IgG (red).

1X10^6 HeLa cells were stained with 0.2ug GAPDH antibody (60004-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). FITC-Goat anti-Mouse IgG with dilution 1:100.