### Basic Information

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>GenBank Accession Number</th>
<th>Recommended Dilutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>60004-1-Ig</td>
<td>BC014159</td>
<td>WB 1:5000-1:50000</td>
</tr>
<tr>
<td></td>
<td>GenElD (NCBI):</td>
<td>IP 0.5-4.0 μg for IP and 1:2000-1:12000 for WB</td>
</tr>
<tr>
<td></td>
<td>2597</td>
<td>IHC 1:300-1:500</td>
</tr>
</tbody>
</table>

- **Size:** 150 μg/150 μl
- **Source:** Mouse
- **Isotype:** IgG2b
- **Purification Method:** Protein A purification
- **Immunogen Catalog Number:** AG0766

### Applications

- **Tested Applications:** FC, IF, IHC, IP, WB, ELISA
- **Cited Applications:** IHC, IP, WB

- **Species Specificity:** human, mouse, rat, zebrafish, yeast, plant
- **Cited Species:** Artemia sinica, beagle, cow, Cyprinus carpio, Eshnomy, fish, hamster, human, monkey, moth, mouse, octo-chick, pig, Porine Müller, rat, swine, tree shrew, Xenopus laevis, Yeast, zebrafish

### 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 a mouse monoclonal antibody raised against full length GAPDH of human origin. It can recognize the 36 kDa GAPDH protein in most cells/tissues. Please note that some physiological factors, such as hypoxia and diabetes, increase GAPDH expression in certain cell types.

### Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaehwan You</td>
<td>26423946</td>
<td>J Virol</td>
<td>WB</td>
</tr>
<tr>
<td>Junhua Guo</td>
<td>25234407</td>
<td>Mbl Cells</td>
<td>WB</td>
</tr>
<tr>
<td>Jiye Fang</td>
<td>27619979</td>
<td>Sci Rep</td>
<td></td>
</tr>
</tbody>
</table>

### Storage

- **Storage:** Store at -20°C. Stability for one year after shipment.
- **Storage Buffer:** PBS with 0.1% 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.
Selected Validation Data

Western blot analysis of GAPDH in various tissues and cell lines using Proteintech antibody 60004-1-lg at a dilution of 1:10,000.

Western blot of HeLa cell with anti-GAPDH (60004-1-lg) at various dilutions.

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

Immunohistochemistry of paraffin-embedded human kidney tissue slides using 60004-1-lg (GAPDH Antibody) at dilution of 1:50 (under 10x lens)

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

2X10^6 HeLa cells were stained with 0.2ug GAPDH antibody (60004-1-lg, red) and control antibody (blue). Fixed with 50% MICH and blocked with 3% BSA/C50 min. FITC-Goat anti-Mouse IgG with dilution 1:100.