**Basic Information**

- **Catalog Number:** 12381-1-AP
- **Size:** 63 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG3047
- **GenBank Accession Number:** BC020963
- **GeneID (NCBI):** 7532
- **Full Name:** tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide
- **Calculated MW:** 247aa, 28 kDa
- **Observed MW:** 28-33 kDa

**Recommended Dilutions:**

- **WB:** 1:500-1:1000
- **IP:** 0.5-4.0 μg for IP and 1:500-1:1000 for WB
- **IHC:** 1:50-1:500
- **IF:** 1:10-1:100

**Applications**

- **Tested Applications:** IF, IHC, IP, WB, ELISA
- **Cited Applications:** CoIP, IP, WB
- **Species Specificity:** human, mouse, rat, dog
- **Cited Species:** human

**Note:** suggested antigen retrieval with TE buffer pH 9.0. (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:**

- **WB:** mouse IMCD3 cells (RNAi); A431 cells
- **IP:** mouse brain tissue;
- **IHC:** human lung cancer tissue; human breast cancer tissue
- **IF:** MDCK cells

**Background Information**

14-3-3 gamma (also known as YWHAG) is a member of 14-3-3 proteins which were the first phosphoserine/phosphothreonine-binding proteins to be discovered. 14-3-3 family members interact with a wide spectrum of proteins and possess diverse functions. Mammals express seven distinct 14-3-3 isoforms (gamma, epsilon, beta, zeta, sigma, theta, tau) that form multiple homo- and hetero- dimmers. 14-3-3 proteins display the highest expression levels in the brain, and have been implicated in several neurodegenerative diseases, including Alzheimer’s disease and amyotrophic lateral sclerosis. This antibody specifically recognizes gamma isoform of 14-3-3.

**Notable Publications**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Songlin Zeng</td>
<td>2504190</td>
<td>Proteomics</td>
<td>WB</td>
</tr>
<tr>
<td>Yang Xu</td>
<td>3063408</td>
<td>Autophagy</td>
<td>CoIP</td>
</tr>
<tr>
<td>Jia Song</td>
<td>30006223</td>
<td>J Exp Clin Cancer Res</td>
<td>WB/IP</td>
</tr>
</tbody>
</table>

**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffers:** 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:

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E proteintech@ptglab.com
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Selected Validation Data

A431 cells were subjected to SDS PAGE followed by western blot with 12381-1-AP 14-3-3 GAMMA- Specific antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.

RNAi result of 12381-1-AP (anti-14-3-3G) in Mouse IMCD3 cells from Dr. Seongjin Seo.

IP Result of anti-14-3-3 GAMMA-Specific (IP: 12381-1-AP, 3ug, Detection: 12381-1-AP 1:800) with mouse brain tissue lysate 8000ug.

Immunohistochemistry of paraffin-embedded human lung cancer tissue slide using 12381-1-AP 14-3-3 GAMMA-Specific antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded human lung cancer tissue slide using 12381-1-AP 14-3-3 GAMMA-Specific antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunofluorescent analysis of MDCK cells using 12381-1-AP 14-3-3 GAMMA-Specific antibody at dilution of 1:25 and Alexa Fluor 488-conjugated All in One Goat Anti-Rabbit IgG (H+L)