### Basic Information

- **Catalog Number:** 13057-2-AP
- **Size:** 37 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG3728
- **GenBank Accession Number:** BC006997
- **GeneID (NCBI):** 10146
- **Full Name:** GTPase activating protein (SH3 domain) binding protein 1
- **Calculated MW:** 466 aa, 52 kDa
- **Observed MW:** 55-60 kDa

### Recommended Dilutions:
- **WB:** 1:5000-1:50000
- **IP:** 0.5-4.0 μg for IP and 1:500-1:2000 for WB
- **IHC:** 1:50-1:500
- **IF:** 1:50-1:500

### Applications

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

### 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:** Aliquoting is unnecessary for -20°C storage.

### Background Information

GAP SH3 Binding Protein 1 (G3BP1), also named as G3BP, is an effector of stress granule (SG) assembly. SG biology plays an important role in the pathophysiology of TDP-43 in ALS and FTLD-U. G3BP1 can be used as a marker of SG. It has been shown to function downstream of Ras and play a role in RNA metabolism, signal transduction, and proliferation. G3BP1 is a ubiquitously expressed protein that localizes to the cytoplasm in proliferating cells and to the nucleus in non-proliferating cells. G3BP1 has recently been implicated in cancer biology.

### Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
<th>Application</th>
</tr>
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<tbody>
<tr>
<td>Qin Xia</td>
<td>26916188</td>
<td>Hum Mol Genet</td>
<td>IF</td>
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<tr>
<td>Nicolas Cifuentes-Munoz</td>
<td>28978704</td>
<td>J Viral</td>
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<tr>
<td>Mai Yamakawa</td>
<td>25368548</td>
<td>Hum Mol Genet</td>
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### Background Information

- **Positive Controls:**
  - **WB:** Neuro-2a cells, A431 cells, HeLa cells, human brain tissue, HepG2 cells, HEK-293 cells, C6 cells, MCF-7 cells, rat brain tissue, HEK-293 cells, Jurkat cells
  - **IP:** HEK-293 cells
  - **IHC:** human testis tissue, human breast cancer tissue, human skeletal muscle tissue
  - **IF:** HeLa cells, Ethacrynic acid treated HepG2 cells, HepG2 cells

### Sense

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 13057-2-AP (G3BP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

WB result of G3BP1 antibody (13057-2-AP; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP1 transfected HEK-293 cells.

Immunohistochemistry of paraffin-embedded human testis tissue slide using 13057-2-AP (G3BP1 antibody) at dilution of 1:200 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded human testis tissue slide using 13057-2-AP (G3BP1 antibody) at dilution of 1:200 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunofluorescent analysis of HepG2 cells using 13057-2-AP (G3BP1 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.


Immunofluorescent analysis of Ethacrynic acid treated HepG2 cells using 13057-2-AP (G3BP1 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.

Immunofluorescent analysis of ( -20 degree C Ethanol ) fixed HeLa cells using 13057-2-AP (G3BP1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.