

For Research Use Only

# G3BP1 Polyclonal antibody

Catalog Number: 13057-2-AP

Featured Product

161 Publications



## Basic Information

### Catalog Number:

13057-2-AP

### Size:

150ul, Concentration: 650 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3728

### GenBank Accession Number:

BC006997

### GeneID (NCBI):

10146

### UNIPROT ID:

Q13283

### Full Name:

GTPase activating protein (SH3 domain) binding protein 1

### Calculated MW:

466 aa, 52 kDa

### Observed MW:

68 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:800

IF 1:1000-1:4000

## Applications

### Tested Applications:

WB, IP, IF, FC, IHC, ELISA

### Cited Applications:

WB, IP, IF, RIP, IHC, CoIP

### Species Specificity:

human, rat, mouse

### Cited Species:

human, chicken, rat, mouse, monkey, pig

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

### Positive Controls:

**WB:** C6 cells, HEK-293 cells, human brain tissue, Neuro-2a cells, HeLa cells, HepG2 cells, MCF-7 cells, Jurkat cells, mouse kidney tissue, rat kidney tissue, mouse brain tissue, rat brain tissue

**IP:** HEK-293 cells,

**IHC:** human colon cancer tissue, human breast cancer tissue, human lung cancer tissue

**IF:** sodium arsenite treated HeLa cells,

## 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 FTL-D-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

Author	Pubmed ID	Journal	Application
Jumin Park	34551427	Nucleic Acids Res	IF
Bin Dai	34560101	J Biol Chem	IF
Jozsef Gal	31481451	Mol Cell Biol	WB,IF

## 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

\*\*\* 20ul sizes contain 0.1% BSA

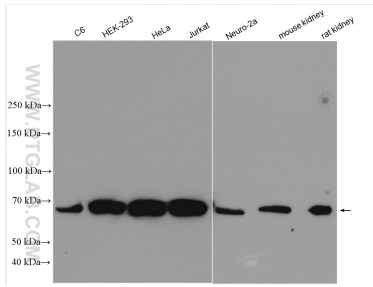
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

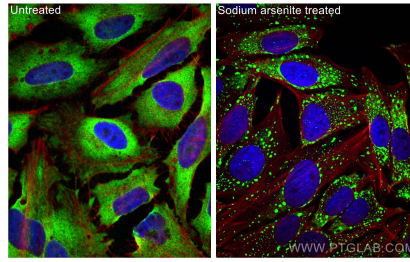
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

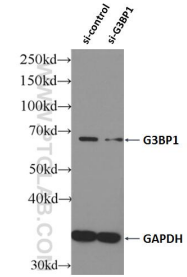
## Selected Validation Data



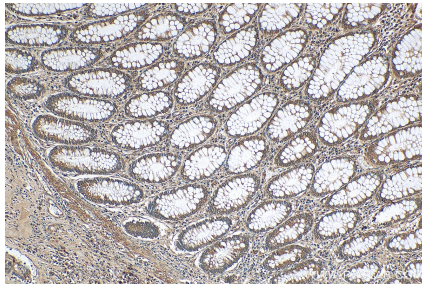
Various lysates were subjected to SDS PAGE followed by western blot with 13057-2-AP (G3BP1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



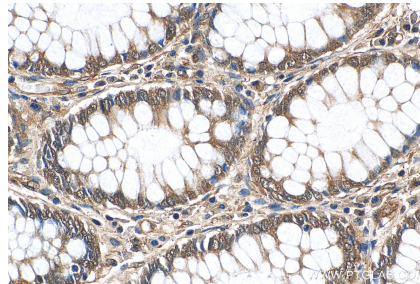
Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP1 antibody (13057-2-AP) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



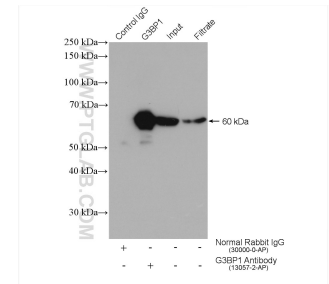
WB result of G3BP1 antibody (13057-2-AP; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP1 transfected HEK-293 cells.



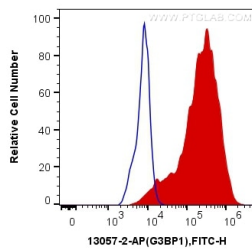
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 13057-2-AP (G3BP1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 13057-2-AP (G3BP1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-G3BP1 (IP:13057-2-AP, 4ug; Detection:13057-2-AP 1:1000) with HEK-293 cells lysate 1040 ug.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.2 ug Anti-Human G3BP1 (13057-2-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).