

For Research Use Only

G3BP1 Polyclonal antibody

Catalog Number: 13057-2-AP

Featured Product

211 Publications



Basic Information

Catalog Number:

13057-2-AP

Concentration:

800 ug/ml

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 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:1000-1:4000

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP, RIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, monkey, chicken, drosophila melanogaster (fruit fly)

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, MCF-7 cells, Neuro-2a cells, HeLa cells, Jurkat cells, mouse kidney tissue, rat kidney tissue, mouse brain tissue, rat brain tissue

IP: HEK-293 cells,

IHC: human lung cancer tissue, human colon cancer tissue

IF/ICC: sodium arsenite treated HeLa cells,

FC (Intra): 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. 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

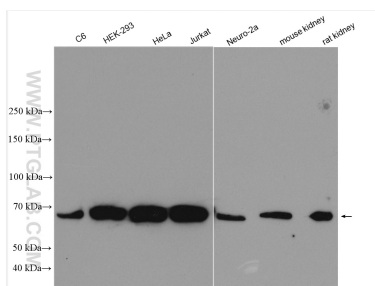
T: 4006900926

E: Proteintech-CN@ptglab.com

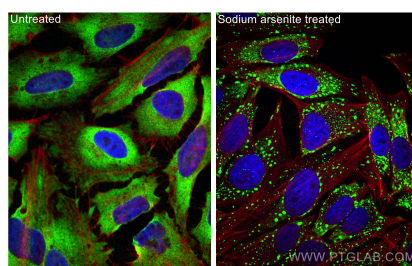
W: ptgcn.com

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

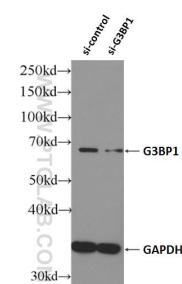
Selected Validation Data



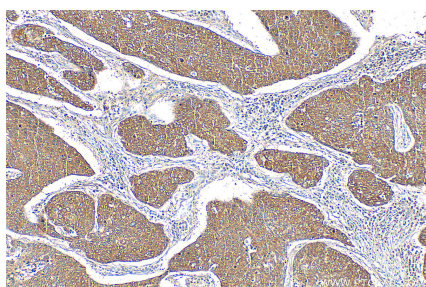
Various lysates were subjected to SDS PAGE followed by western blot with 13057-2-AP (G3BP1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



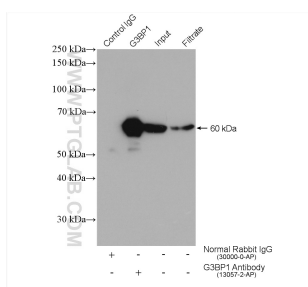
Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP1 antibody (13057-2-AP) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



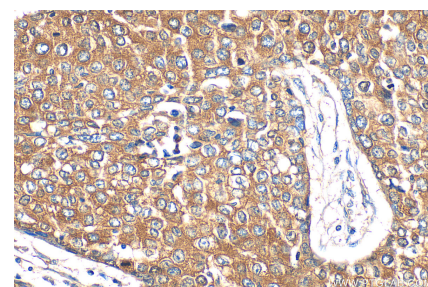
WB result of G3BP1 antibody (13057-2-AP; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP1 transfected HEK-293 cells.



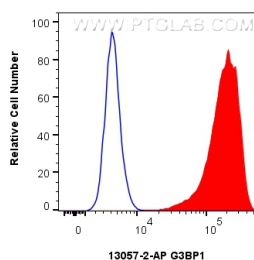
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 13057-2-AP (G3BP1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 13057-2-AP (G3BP1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug G3BP1 Polyclonal antibody (13057-2-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).