For Research Use Only

G3BP1 Polyclonal antibody

Catalog Number:13057-2-AP Featured Product 194 Publications

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Basic Information

Catalog Number:
13057-2-AP

Size:
150ul , Concentration: 900 ug/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 ug for 1.0-3.0 mg of total protein lysate
IHC 1:200-1:800
IF/ICC 1:1000-1:4000

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

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/ICC : 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 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

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

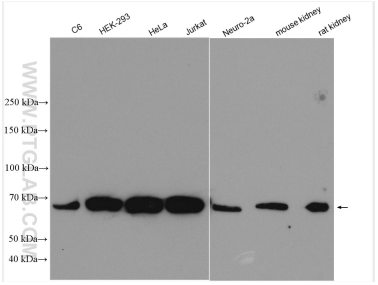
Storage

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

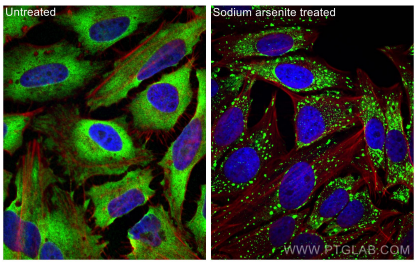
*** 20ul sizes contain 0.1% BSA

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

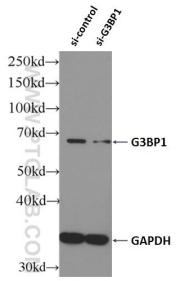
Selected Validation Data



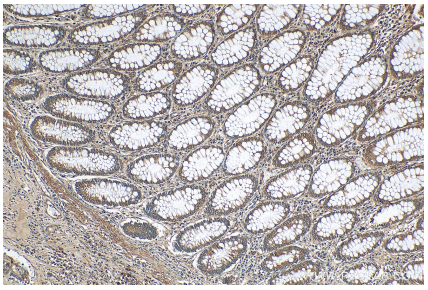
Various lysates were subjected to SDS PAGE followed by western blot with 13057-2-AP (G3BP1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



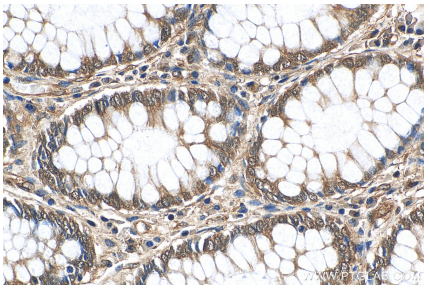
Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP1 antibody (13057-2-AP) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



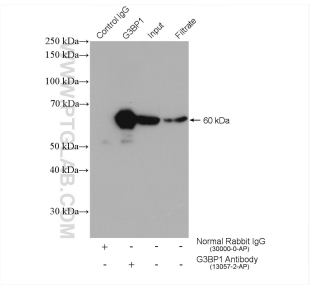
WB result of G3BP1 antibody (13057-2-AP; 1:100000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP1 transfected HEK-293 cells.



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.

1x10^6 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).