

For Research Use Only

G3BP2 Polyclonal antibody

Catalog Number: 16276-1-AP

Featured Product

26 Publications



Basic Information

Catalog Number:

16276-1-AP

Size:

150ul, Concentration: 800 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG9355

GenBank Accession Number:

BC011731

GeneID (NCBI):

9908

UNIPROT ID:

Q9UN86

Full Name:

GTPase activating protein (SH3 domain) binding protein 2

Calculated MW:

482aa, 54 kDa; 449aa, 51 kDa

Observed MW:

65-70 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 1:250-1:1000

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP, RIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

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: A549 cells, HEK-293 cells, HepG2 cells, MCF-7 cells, T47D cells, HeLa cells, Jurkat cells, Neuro-2a cells, C2C12 cells, C6 cells

IP: HeLa cells,

IHC: human lung cancer tissue, mouse liver tissue, rat kidney tissue

IF/ICC: sodium arsenite treated HeLa cells,

Background Information

Stress granules (SGs) are cytoplasmic mRNA-protein condensates formed in response to cellular stressors, such as oxidative stress, ultraviolet radiation, and viral infection (1). The Ras-GTPase-activating protein-binding proteins (G3BPs), consisting of G3BP1 and G3BP2, are key nucleating factors essential for SG formation. They function to protect RNAs from harmful conditions. G3BP2 is mainly distributed in the cytoplasm and participates in the formation of stress granules, cell differentiation, proliferation, and signal transduction. Accumulating evidence has demonstrated that aberrant expression of G3BP2 contributes to cancer initiation and progression, such as high expression of G3BP2 increasing cell stemness, metastasis and chemoresistance in breast cancer.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-------------|-----------|------------|-------------|
| Hongwei Liu | 30458784 | Mol Cancer | WB,IHC |
| Yaqi Chen | 35589951 | Oncogene | WB,IF,IP |
| Damin Yun | 35782098 | PeerJ | 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

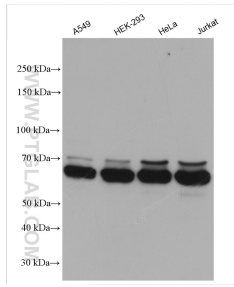
For technical support and original validation data for this product please contact:

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

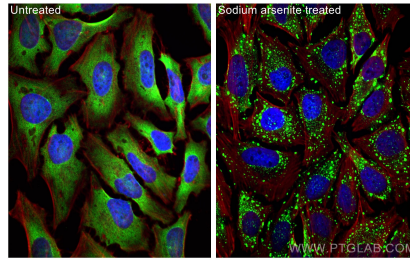
E: proteintech@ptglab.com
W: ptglab.com

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

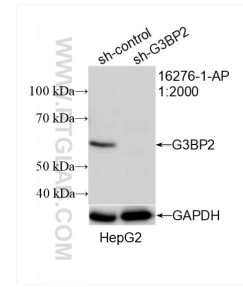
Selected Validation Data



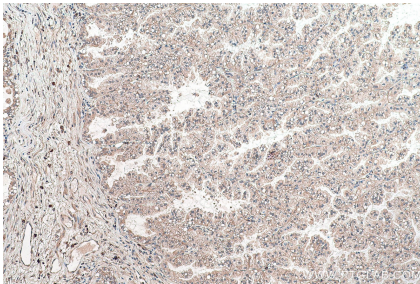
A549 cells were subjected to SDS PAGE followed by western blot with 16276-1-AP (G3BP2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



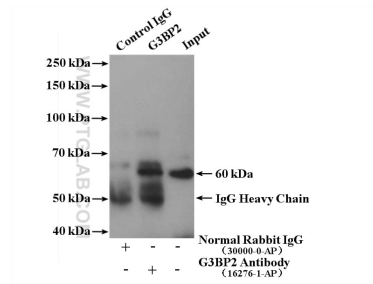
Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP2 antibody (16276-1-AP) at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



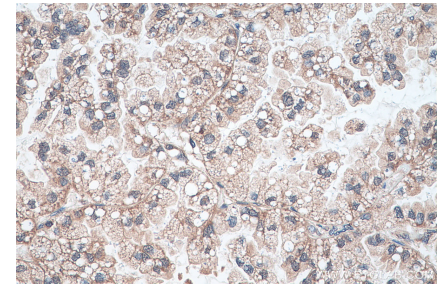
WB result of G3BP2 antibody (16276-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP2 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 16276-1-AP (G3BP2 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-G3BP2 (IP:16276-1-AP, 4ug; Detection:16276-1-AP 1:1000) with HeLa cells lysate 2200 ug.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 16276-1-AP (G3BP2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).