### For Research Use Only

# G3BP2 Monoclonal antibody

Catalog Number:68580-1-lg Featured Product

1 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

68580-1-lg BC011731 GeneID (NCBI):

150ul, Concentration: 1000 ug/ml by 9908 Nanodrop: **UNIPROT ID:** Q9UN86 Mouse Full Name:

Isotype: GTPase activating protein (SH3 lgG1 domain) binding protein 2

Immunogen Catalog Number: Calculated MW:

482aa,54 kDa; 449aa,51 kDa AG9222

> Observed MW: 54 kDa

**Applications** 

**Tested Applications:** WB, IF/ICC, ELISA

Cited Applications:

Species Specificity: human, rat Cited Species: human

Positive Controls:

WB: HeLa cells, A549 cells, HCT 116 cells, HepG2 cells, rat brain tissue, SCaBER cells, K-562 cells, MOLT-4

**Purification Method:** 

CloneNo.:

2E5G3

Protein G purification

Recommended Dilutions:

WB: 1:5000-1:50000

IF/ICC: 1:400-1:1600

cells, HT-29 cells

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  $expression \ of \ G3BP2 \ increasing \ cell \ stemmess, \ metastasis \ and \ chemoresistance \ in \ breast \ cancer.$ 

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Fanzheng Meng	40467995	Nat Cancer	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

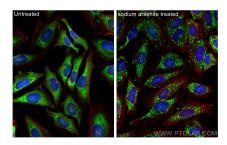
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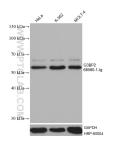
E: proteintech@ptglab.com W: ptglab.com

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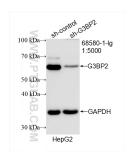
## **Selected Validation Data**



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP2 antibody (68580-1-lg, Clone: 2E5G3) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).



Various lysates were subjected to SDS PAGE followed by western blot with 68580-1-lg (G3BP2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control



WB result of G3BP2 antibody (68580-1-lg; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP2 transfected HepG2 cells.