For Research Use Only

## G3BP2 Monoclonal antibody, PBS Only

Catalog Number:68580-1-PBS Featured Product



**Purification Method:** 

Protein G purification

CloneNo.:

2E5G3

**Basic Information** 

Catalog Number: 68580-1-PBS

Size:

BC011731

GeneID (NCBI):

GenBank Accession Number:

 1mg/ml
 9908

 Source:
 UNIPROT ID:

 Mouse
 Q9UN86

Isotype: Full Name:
IgG1 GTPase activating protein (SH3

Immunogen Catalog Number: domain) binding protein 2
AG9222 Calculated MW:

482aa,54 kDa; 449aa,51 kDa

Observed MW: 54 kDa

**Applications** 

Tested Applications:

WB, IF/ICC, Indirect ELISA

Species Specificity:

human, rat

## **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.

Storage

Storage:

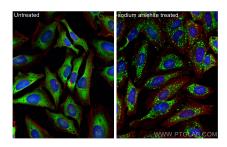
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

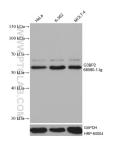
Storage Buffer

PBS Only

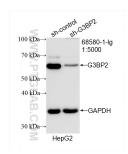
## **Selected Validation Data**



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP2 antibody (68580-1-Ig, Clone: 2E5G3) at dilution of 1:800 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red). This data was developed using the same antibody clone with 68580-1-PBS in a different storage buffer formulation.



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. This data was developed using the same antibody clone with 68580-1-PBS in a different storage buffer formulation.



WB result of G3BP2 antibody (68580-1-1g; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP2 transfected HepG2 cells. This data was developed using the same antibody clone with 68580-1-PBS in a different storage buffer formulation.