For Research Use Only

G3BP2 Recombinant antibody

Catalog Number:82080-6-RR

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Uni-rAb
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Basic Information

Catalog Number:
82080-6-RR

Size:
100ul , Concentration: 1000 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:
Protein A purification

CloneNo.:
230275G3

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:500-1:2000
IF/ICC 1:500-1:2000

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:
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 : HeLa cells, K-562 cells, HEK-293 cells, A549 cells, Jurkat cells, MCF-7 cells, mouse cerebellum tissue

IHC : human intrahepatic cholangiocarcinoma tissue, human ovary cancer 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.

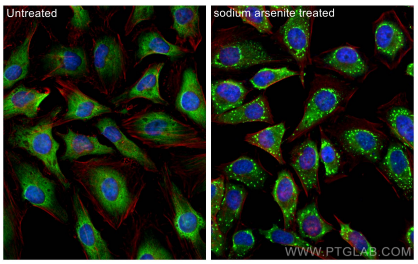
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

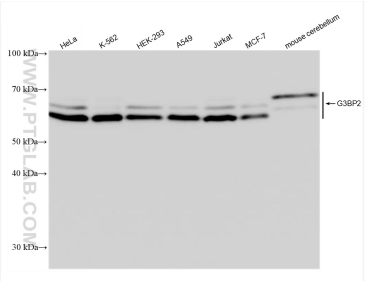
***** 20ul sizes contain 0.1% BSA**

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

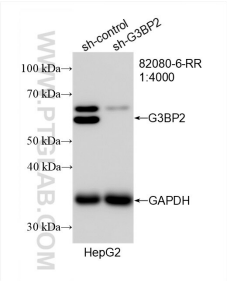
Selected Validation Data



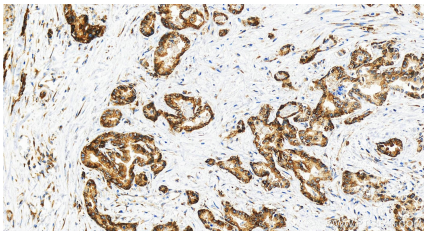
Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP2 antibody (82080-6-RR, Clone: 230275G3) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



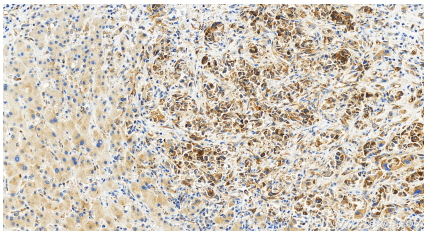
Various lysates were subjected to SDS PAGE followed by western blot with 82080-6-RR (G3BP2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



WB result of G3BP2 antibody (82080-6-RR; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-G3BP2 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 82080-6-RR (G3BP2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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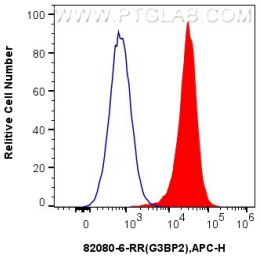
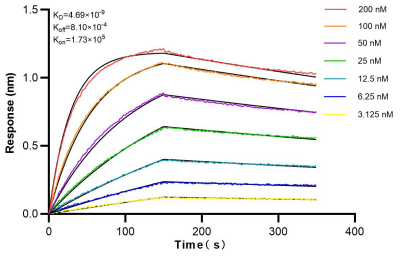


1x10^6 U2OS cells were intracellularly stained with 0.25 ug Anti-Human G3BP2 (82080-6-RR, Clone:230275G3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 82080-6-RR against Human G3BP2 were performed. The affinity constant is 4.69 nM.