

For Research Use Only

G3BP2 Recombinant antibody

Catalog Number: 82080-4-RR



Basic Information

Catalog Number: 82080-4-RR	GenBank Accession Number: BC011731	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 9908	CloneNo.: 230275D6
Source: Rabbit	UNIPROT ID: Q9UN86	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:500-1:2000
Isotype: IgG	Full Name: GTPase activating protein (SH3 domain) binding protein 2	
Immunogen Catalog Number: AG9355	Calculated MW: 482aa,54 kDa; 449aa,51 kDa	
	Observed MW: 65-70 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: human	WB : HeLa cells, HEK-293 cells, HepG2 cells, A549 cells, Jurkat cells, K-562 cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : human intrahepatic cholangiocarcinoma 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

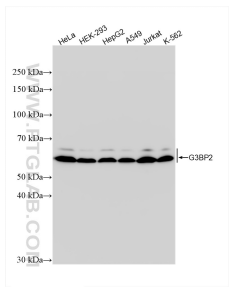
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

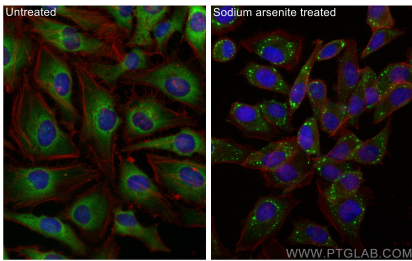
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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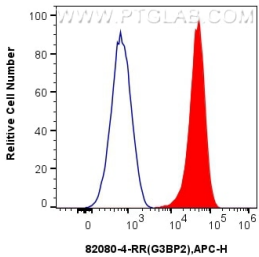
Selected Validation Data



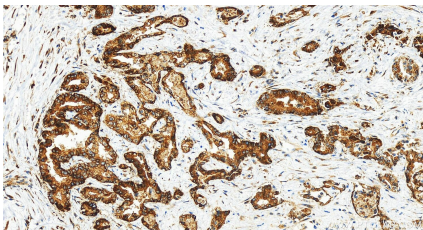
Various lysates were subjected to SDS PAGE followed by western blot with 82080-4-RR (G3BP2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



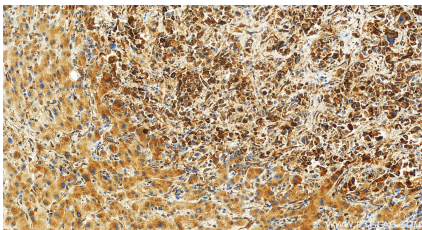
Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP2 antibody (82080-4-RR, Clone: 230275D6) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



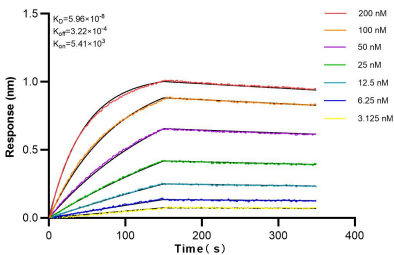
1x10⁶ U2OS cells were intracellularly stained with 0.25 ug Anti-Human G3BP2 (82080-4-RR, Clone:230275D6) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:166(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 82080-4-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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Bi-layer interferometry (BLI) kinetic assays of 82080-4-RR against Human G3BP2 were performed. The affinity constant is 59.6 nM.