## For Research Use Only

## G3BP1 Recombinant antibody

Catalog Number:80777-1-RR



**Basic Information** 

 Catalog Number:
 GenBank Accession Number:

 80777-1-RR
 BC006997

 Concentration:
 GeneID (NCBI):

 1000 ug/ml
 10146

 Source:
 UNIPROT ID:

 Rabbit
 Q13283

Full Name: GTPase activating protein (SH3 domain) binding protein 1

AG3728 Calculated MW: 466 aa, 52 kDa

**Applications** 

Tested Applications: IHC, IF/ICC, IF-P, ELISA Species Specificity:

Immunogen Catalog Number:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

human, mouse

Note-IHC: suggested antigen retrieval with

buffer pH 6.0

Isotype:

Purification Method: Protein A purification

CloneNo.: 7F14

Recommended Dilutions: IHC 1:200-1:800 IF-P 1:250-1:1000 IF/ICC 1:500-1:2000

Background Information

GAP SH3 Binding Protein 1 (G3BP1), also named as G3BP, is an effector of stress granule (SG) assembly. SG biology plays an important role in the pathophysiology of TDP-43 in ALS and FTLD-U. G3BP1 can be used as a marker of SG. It has been shown to function downstream of Ras and play a role in RNA metabolism, signal transduction, and proliferation. G3BP1 is a ubiquitously expressed protein that localizes to the cytoplasm in proliferating cells and to the nucleus in non-proliferating cells. G3BP1 has recently been implicated in cancer biology.

Positive Controls:

IHC: mouse brain tissue,

IF-P: mouse brain tissue,

IF/ICC: sodium arsenite treated HeLa cells,

Storage

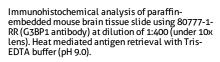
Storage:

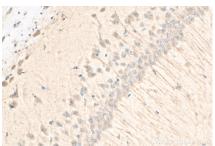
Store at -20°C. Stable for one year after shipment. Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol Aliquoting is unnecessary for -20°C storage

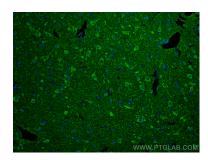
## **Selected Validation Data**



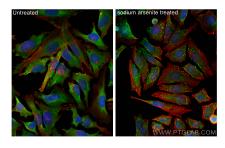




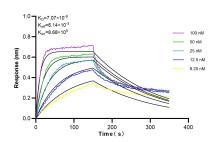
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 80777-1-RR (G3BP1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using G3BP1 antibody (80777-1-RR, Clone: 7F14) at dilution of 1:500 and Multi-rAb Coralite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP1 antibody (80777-1-RR, Clone: 7F14) at dilution of 1:1400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Biolayer interferometry (BLL) kinetic assays of 80777-1-RR against Human G3BP1 were performed. The affinity constant is 7.07 nM.