### For Research Use Only

# G3BP1 Monoclonal antibody

Catalog Number:66486-1-lg Featured Product

69 Publications



**Basic Information** 

Catalog Number: 66486-1-lg Source:

Mouse Isotype: lgG1

Immunogen Catalog Number:

AG3728

GenBank Accession Number:

BC006997 GeneID (NCBI): 10146 **UNIPROT ID:** Q13283 Full Name:

GTPase activating protein (SH3 domain) binding protein 1

Calculated MW: 466 aa, 52 kDa Observed MW: 68 kDa

**Purification Method:** 

Protein G purification

CloneNo.: 1E4A2

Recommended Dilutions:

WB: 1:5000-1:50000 IHC: 1:50-1:500 IF/ICC: 1:500-1:2000

# **Applications**

**Tested Applications:** WB, IHC, IF/ICC, ELISA **Cited Applications:** WB, IF, IP, CoIP, RIP Species Specificity: human, mouse, rat, pig

Cited Species:

human, mouse, rat, pig, monkey

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: LNCaP cells, RAW 264.7 cells, pig brain tissue, HeLa cells, mouse brain tissue, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, HSC-T6 cells, PC-12 cells, NIH/3T3 cells, 4T1 cells

IHC: human testis tissue, human colon tissue, human lymphoma tissue, rat brain tissue

IF/ICC: sodium arsenite treated HeLa cells,

# **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.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Bin Dai	34560101	J Biol Chem	IF
Parimal Samir	31511697	Nature	WB,IF
Niclas Stefan Rasmussen	31681284	Front Immunol	

# Storage

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

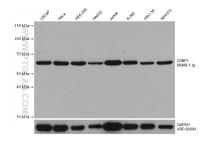
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

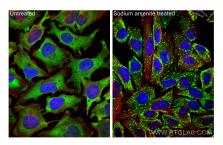
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

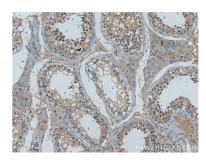
# **Selected Validation Data**



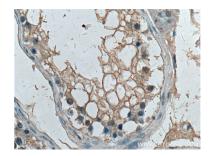
Various lysates were subjected to SDS PAGE followed by western blot with 66486-1-lg (G3BP1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated HeLa cells using G3BP1 antibody (66486-1-Ig, Clone: 1E4A2) at dilution of 1:1000 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffinembedded human testis tissue slide using 66486-1-Ig (G3BP antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human testis tissue slide using 66486-1-Ig (G3BP antibody) at dilution of 1:200 (under 40x lens).