

For Research Use Only

# GBP1 Polyclonal antibody

Catalog Number: 15303-1-AP

Featured Product

21 Publications



## Basic Information

### Catalog Number:

15303-1-AP

### Size:

500 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7562

### GenBank Accession Number:

BC002666

### GeneID (NCBI):

2633

### UNIPROT ID:

P32455

### Full Name:

GTP binding protein 1

### Calculated MW:

68 kDa

### Observed MW:

67 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:10-1:100

## Applications

### Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

### Cited Applications:

IF, IHC, RIP, WB

### Species Specificity:

human

### Cited Species:

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: human placenta tissue, human brain tissue, HUVEC cells

IP: human placenta tissue,

IHC: human spleen tissue,

IF: MCF-7 cells,

## Background Information

Guanylate binding protein 1 (GBP1) belongs to the dynamin superfamily of large GTPases. The expression of GBP1 is induced by interferon and GBP1 is characterized by its ability to specifically bind guanine nucleotides such as GMP, GDP, and GTP and its ability to hydrolyze GTP to GDP and GMP. GBP1 is induced in response to type I and type II interferons and as such plays a role in protective immunity against a spectrum of intracellular pathogens ranging from viruses to bacteria to protozoa, such as negative-strand RNA Rhabdovirus, vesicular stomatitis virus and the positive-strand RNA Picornavirus, encephalomyocarditis virus in cultured cells, the inhibition of Chlamydia trachomatis, Toxoplasma gondii, and Salmonella enterica.

## Notable Publications

Author	Pubmed ID	Journal	Application
Matthew Charman	34621686	Front Cell Infect Microbiol	WB
Mary Akinyi Nyonda	33040458	Cell Microbiol	IF
Motoi Fukumoto	25098609	Cancer Sci	WB, IHC

## 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

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

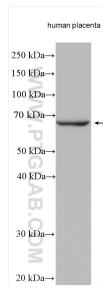
T: 4006900926

E: Proteintech-CN@ptglab.com

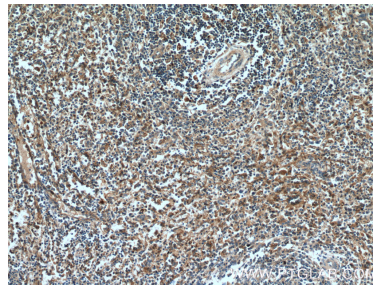
W: ptgcn.com

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

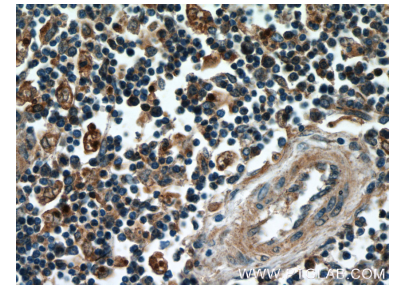
## Selected Validation Data



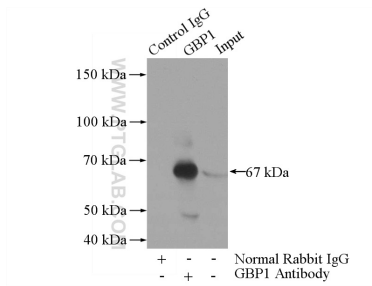
Human placenta tissue were subjected to SDS PAGE followed by western blot with 15303-1-AP (GBP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



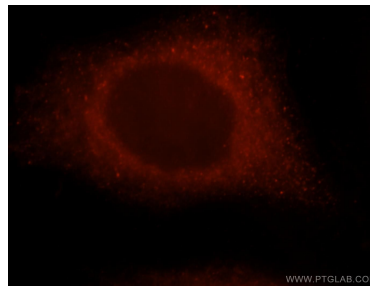
Immunohistochemical analysis of paraffin-embedded human spleen tissue slide using 15303-1-AP (GBP1 antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human spleen tissue slide using 15303-1-AP (GBP1 antibody) at dilution of 1:200 (under 40x lens).



IP result of anti-GBP1 (IP:15303-1-AP, 4ug; Detection:15303-1-AP 1:600) with human placenta tissue lysate 4000ug.



Immunofluorescent analysis of MCF-7 cells, using GBP1 antibody 15303-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).