

For Research Use Only

# STAT3 Monoclonal antibody

Catalog Number: 60199-1-Ig

Featured Product

85 Publications



## Basic Information

### Catalog Number:

60199-1-Ig

### Size:

150ul, Concentration: 1557 ug/ml by 6774  
Nanodrop and 1093 ug/ml by Bradford  
method using BSA as the standard;

### Source:

Mouse

### Isotype:

IgG2a

### Immunogen Catalog Number:

AG0360

### GenBank Accession Number:

BC000627

### GeneID (NCBI):

6774

### UNIPROT ID:

P40763

### Full Name:

signal transducer and activator of  
transcription 3 (acute-phase response  
factor)

### Calculated MW:

770 aa, 88 kDa

### Observed MW:

85-88 kDa

### Purification Method:

Protein A purification

### CloneNo.:

3G2D12

### Recommended Dilutions:

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

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, rat

### Cited Species:

human, zebrafish, bovine

### Positive Controls:

IP: HeLa cells,

IHC: human cervical cancer tissue, human heart tissue,  
human breast cancer tissue, human endometrial  
cancer tissue, human liver tissue, human lung cancer  
tissue

IF/ICC: HepG2 cells,

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

## Background Information

Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, synonyms: APRF, FLJ20882, MGC16063) is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. STAT3 is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. STAT3 mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of STAT3. This antibody is a mouse monoclonal antibody raised against residues near the N terminus of human STAT3. STAT3 exists three isoforms and the molecular weight of each isoform respectively is 83 kDa, 87 kDa and 88 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wenbin Pei	34650433	Front Pharmacol	IF
Shaofang Chen	28944901	Mol Med Rep	WB
Bin Zhu	31541631	Biochem Pharmacol	WB

## Storage

### 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

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

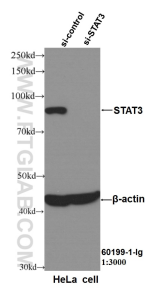
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

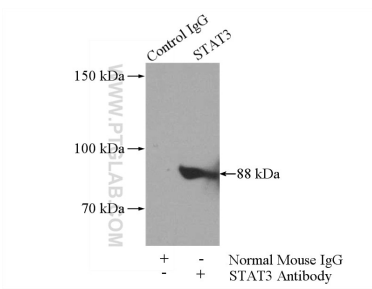
E: proteintech@ptglab.com  
W: ptglab.com

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Group brand and is not available to purchase from any  
other manufacturer.

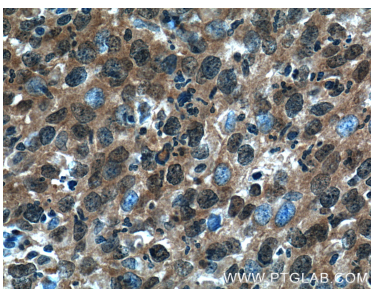
Selected Validation Data



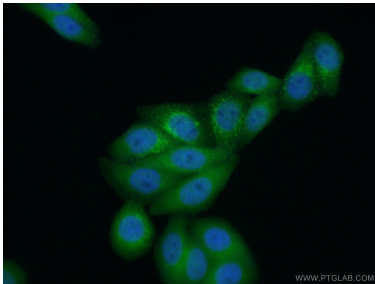
WB result of STAT3 antibody (60199-1-Ig, 1:3000) with si-Control and si-STAT3 transfected HeLa cells.



IP result of anti-STAT3 (IP:60199-1-Ig, 5ug; Detection:60199-1-Ig 1:2000) with HeLa cells lysate 1400ug.



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 60199-1-Ig (STAT3 Antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (10% Formaldehyde ) fixed HepG2 cells using 60199-1-Ig(STAT3 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using STAT3 antibody (60199-1-Ig, Clone: 3G2D12 ) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).