## For Research Use Only

# STAT3 Monoclonal antibody

Catalog Number:60199-1-lg

Featured Product

95 Publications



**Basic Information** 

Catalog Number: 60199-1-lg Concentration: 1000 ug/ml

Source: Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG0360

GenBank Accession Number:

BC000627 GeneID (NCBI): 6774 **UNIPROT ID:** 

Full Name: signal transducer and activator of transcription 3 (acute-phase response IHC: 1:50-1:500

P40763

Calculated MW: 770 aa, 88 kDa Observed MW: 85-88 kDa

**Purification Method:** 

Protein A purification CloneNo.:

Recommended Dilutions:

WB: 1:200-1:1000 IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IF/ICC: 1:50-1:500

3G2D12

**Applications** 

**Tested Applications:** WB, IHC, IF/ICC, IP, ELISA

**Cited Applications:** WB, IHC, IF, IP, CoIP Species Specificity: human, mouse, rat **Cited Species:** 

human, mouse, rat, zebrafish, bovine

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: HeLa cells, Jurkat cells, RAW 264.7 cells, rat brain

tissue

IP: HeLa cells,

IHC: human cervical cancer tissue, human

endometrial cancer tissue IF/ICC: HepG2 cells,

## **Background Information**

Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, synonyms: APRF, FLJ 20882, MGC 16063) 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

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

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

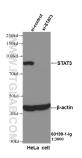
Aliquoting is unnecessary for -20°C storage

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

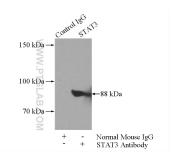
T: 4006900926 E: Proteintech-CN@ptglab.com

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

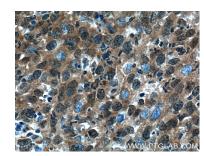
## **Selected Validation Data**



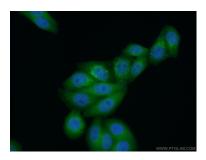
WB result of STAT3 antibody (60199-1-Ig, 1:3000) with si-Control and si-STAT3 transfected HeLa cells.



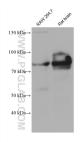
IP result of anti-STAT3 (IP:60199-1-Ig, 5ug; Detection:60199-1-Ig 1:2000) with HeLa cells lysate 1400ug.



Immunohistochemical analysis of paraffinembedded 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-lg(STAT3 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 60199-1-1g (STAT3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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