

For Research Use Only

STAT3 Monoclonal antibody

Catalog Number: 60199-1-Ig

Featured Product

84 Publications



Basic Information

| | | |
|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Catalog Number: 60199-1-Ig | GenBank Accession Number: BC000627 | Purification Method: Protein A purification |
| Size: 150ul, Concentration: 1557 ug/ml by Nanodrop and 1093 ug/ml by Bradford method using BSA as the standard; | GeneID (NCBI): 6774 | CloneNo.: 3G2D12 |
| Source: Mouse | UNIPROT ID: P40763 | 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 |
| Isotype: IgG2a | Full Name: signal transducer and activator of transcription 3 (acute-phase response factor) | |
| Immunogen Catalog Number: AG0360 | Calculated MW: 770 aa, 88 kDa | |
| | Observed MW: 85-88 kDa | |

Applications

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

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human, rat

Cited Species:
human, zebrafish

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:

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,

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 pH 7.3.

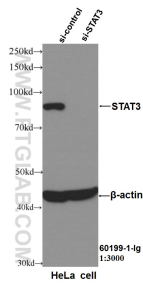
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

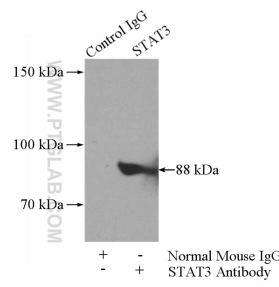
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

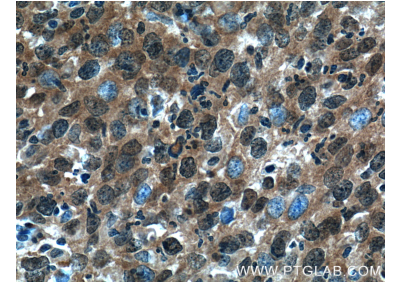
Selected Validation Data



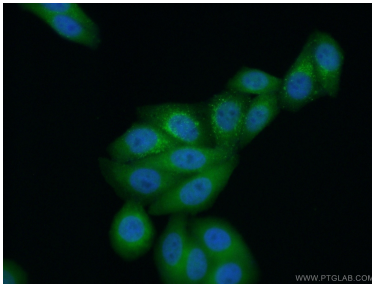
WB result of STAT3 antibody (60199-1-Ig, 1:3000) with si-Control and si-STAT3 transfected HeLa cells.



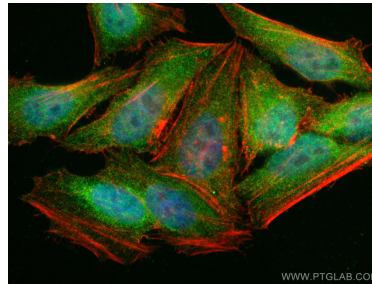
IP result of anti-STAT3 (IP:60199-1-Ig, 5ug; Detection:60199-1-Ig 1:2000) with HeLa cells lysate 1400ug.



Immunohistochemical analysis of 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).