For Research Use Only

STAT3 Monoclonal antibody

Catalog Number:60199-1-Ig Featured Product 159 Publications

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Basic Information

Catalog Number:
60199-1-Ig

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:
WB: 1:200-1:1000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:50-1:500
IF/ICC: 1:200-1:800

Applications

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

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

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, 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

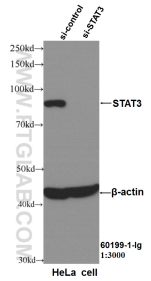
Storage

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

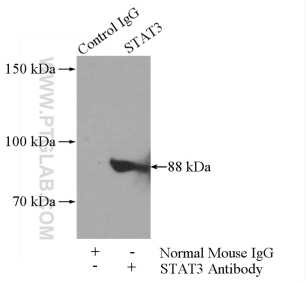
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

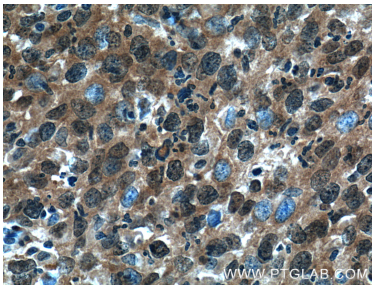
Selected Validation Data



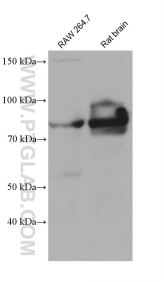
WB result of STAT3 antibody (60199-1-Ig, 1:3000) with si-Control and si-STAT3 transfected HeLa cells.



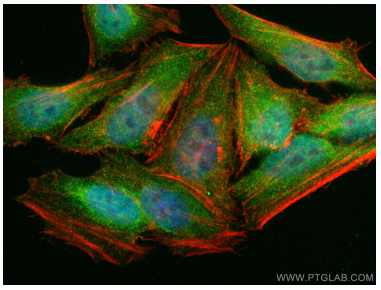
IP result of anti-STAT3 (IP:60199-1-Ig, 5ug; Detection:60199-1-Ig 1:2000) with HeLa cells lysate 1400ug.



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).



RAW 264.7 cells were subjected to SDS PAGE followed by western blot with 60199-1-Ig (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-Ig, Clone: 3G2D12) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).