For Research Use Only

STAT3 Monoclonal antibody

Catalog Number:60199-1-lg

Featured Product

85 Publications



Purification Method:

CloneNo.:

protein lysate

3G2D12

Protein A purification

Recommended Dilutions: IP 0.5-4.0 ug for 1.0-3.0 mg of total

Basic Information

Catalog Number: 60199-1-lg

Concentration: 1000 ug/ml Source:

Isotype: IgG2a

Mouse

Immunogen Catalog Number:

AG0360

GenBank Accession Number:

BC000627 GeneID (NCBI): 6774

UNIPROT ID: P40763 Full Name:

signal transducer and activator of HC 1:50-1:500 transcription 3 (acute-phase response IF/ICC 1:50-1:500

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, bovine

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

IP: HeLa cells,

Positive Controls:

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

IF/ICC: HepG2 cells,

Background Information

Signal transducer and activator of transcription 3 (acute-phase response factor) (STAT3, synonyms: APRF, FLJ20882, 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

Storage:

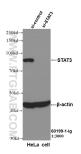
Store at -20°C. Stable for one year after shipment.

Storage Buffer

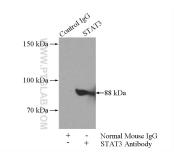
PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

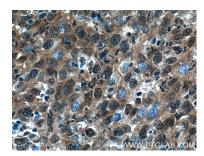
Selected Validation Data



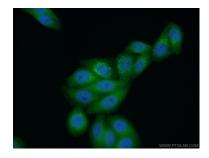
WB result of STAT3 antibody (60199-1-lg, 1:3000) with si-Control and si-STAT3 transfected HeLa cells.



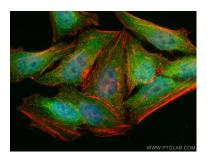
IP result of anti-STAT3 (IP:60199-1-Ig, 5ug; Detection:60199-1-Ig 1:2000) with HeLa cells lysate



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-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-lg, Clone: 3G2D12) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).