



## Rabbit Anti-phospho-STAT3 (Tyr705) antibody

SL1658R

<b>Product Name:</b>	phospho-STAT3 (Tyr705)
<b>Chinese Name:</b>	磷酸化Signal transduction和转录激活因子3抗体
<b>Alias:</b>	STAT3 (phospho Y705); p-STAT3 (phospho Y705); Phospho-Stat3 (pTyr705); STAT3(Phospho-Tyr705); p-STAT3(Tyr705); Phosphorylated Stat3(pTyr705); p-Stat3; Acute Phase Response Factor; APRF; DNA binding protein APRF; FLJ20882; MGC16063; Signal Transducer and Activator of Transcription 3; STAT 3; STAT3 HUMAN.
<b>文献引用</b> PubMed :	<p><b>Specific References(5)</b>SL1658R has been referenced in 5 publications.</p> <p><b>[IF=2.51]</b>Yang, Hai Li, et al. "Effect of suppressor of cytokine signaling 2 (SOCS2) on fat metabolism induced by growth hormone (GH) in porcine primary adipocyte." Molecular biology reports 39.9 (2012): 9113-9122.<b>WB;Pig.</b>  <a href="#">PubMed:22729878</a></p> <p><b>[IF=3.23]</b>Lee E-J, Lee SJ, Kim J-H, Kim K-J, Yang S-H, Jeong K-Y, et al. (2016) Radiation Inhibits Interleukin-12 Production via Inhibition of C-Rel through the Interleukin-6/ Signal Transducer and Activator of Transcription 3 Signaling Pathway in Dendritic Cells. PLoS ONE 11(1): e0146463.<b>WB;Mouse.</b>  <a href="#">PubMed:26745884</a></p> <p><b>[IF=3.23]</b>Sur, Swastika, et al. "Increased Expression of Phosphorylated Polo-Like Kinase 1 and Histone in Bypass Vein Graft and Coronary Arteries following Angioplasty." PloS one 11.1 (2016): e0147937.<b>IF(IHC-P);Pig.</b>  <a href="#">PubMed:26820885</a></p> <p><b>[IF=2.82]</b>Gao, Ling, et al. "Morusin shows potent antitumor activity for human hepatocellular carcinoma in vitro and in vivo through apoptosis induction and</p>

	<p>angiogenesis inhibition." Drug Design, Development and Therapy 11 (2017): 1789.<b>WB;Human.</b></p> <p style="text-align: center;"><a href="#">PubMed:28670112</a></p> <p><b>[IF=0.90]</b>Zhang, Yu, et al. "JAK-STAT signaling regulation of chicken embryonic stem cell differentiation into male germ cells." In Vitro Cellular &amp; Developmental Biology-Animal (2017): 1-16.<b>WB;Chicken.</b></p> <p style="text-align: center;"><a href="#">PubMed:28597334</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,Sheep,Guinea Pig,
<b>Applications:</b>	<p>WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/testIF=1:100-500 (Paraffin sections need antigen repair)</p> <p>not yet tested in other applications.</p> <p>optimal dilutions/concentrations should be determined by the end user.</p>
<b>Molecular weight:</b>	85kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised phosphopeptide derived from human STAT3 around the phosphorylation site of Tyr705:AP(p-Y)LK
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>The protein encoded by this gene 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. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein 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 this protein. PIAS3 protein is a specific inhibitor of this protein. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper-immunoglobulin E syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Sep 2015]</p>

**Function:**

Transcription factor that binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes. Activated by IL31 through IL31RA.

**Subcellular Location:**

Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm. Constitutive nuclear presence is independent of tyrosine phosphorylation. Predominantly present in the cytoplasm without stimuli. Upon leukemia inhibitory factor (LIF) stimulation, accumulates in the nucleus. The complex composed of BART and ARL2 plays an important role in the nuclear translocation and retention of STAT3.

**Tissue Specificity:**

Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

**Post-translational modifications:**

Tyrosine phosphorylated upon stimulation with EGF (By similarity). Tyrosine phosphorylated in response to IL-6, IL-11, CNTF, LIF, CSF-1, EGF, PDGF, IFN-alpha and OSM. Phosphorylated on serine upon DNA damage, probably by ATM or ATR. Serine phosphorylation is important for the formation of stable DNA-binding STAT3 homodimers and maximal transcriptional activity. ARL2BP may participate in keeping the phosphorylated state of STAT3 within the nucleus.

**DISEASE:**

Defects in STAT3 are the cause of hyperimmunoglobulin E recurrent infection syndrome autosomal dominant (AD-HIES) [MIM:147060]; also known as hyper-IgE syndrome or Job syndrome. AD-HIES is a rare disorder of immunity and connective tissue characterized by immunodeficiency, chronic eczema, recurrent Staphylococcal infections, increased serum IgE, eosinophilia, distinctive coarse facial appearance, abnormal dentition, hyperextensibility of the joints, and bone fractures.

**SWISS:**

P40763

**Gene ID:**

6774

**Database links:**

[Entrez Gene: 6774](#)Human

[Entrez Gene: 20848](#)Mouse

[Entrez Gene: 25125](#)Rat

[Omin: 102582](#)Human

[SwissProt: P40763](#)Human

[SwissProt: P42227](#)Mouse

[SwissProt: P52631](#)Rat

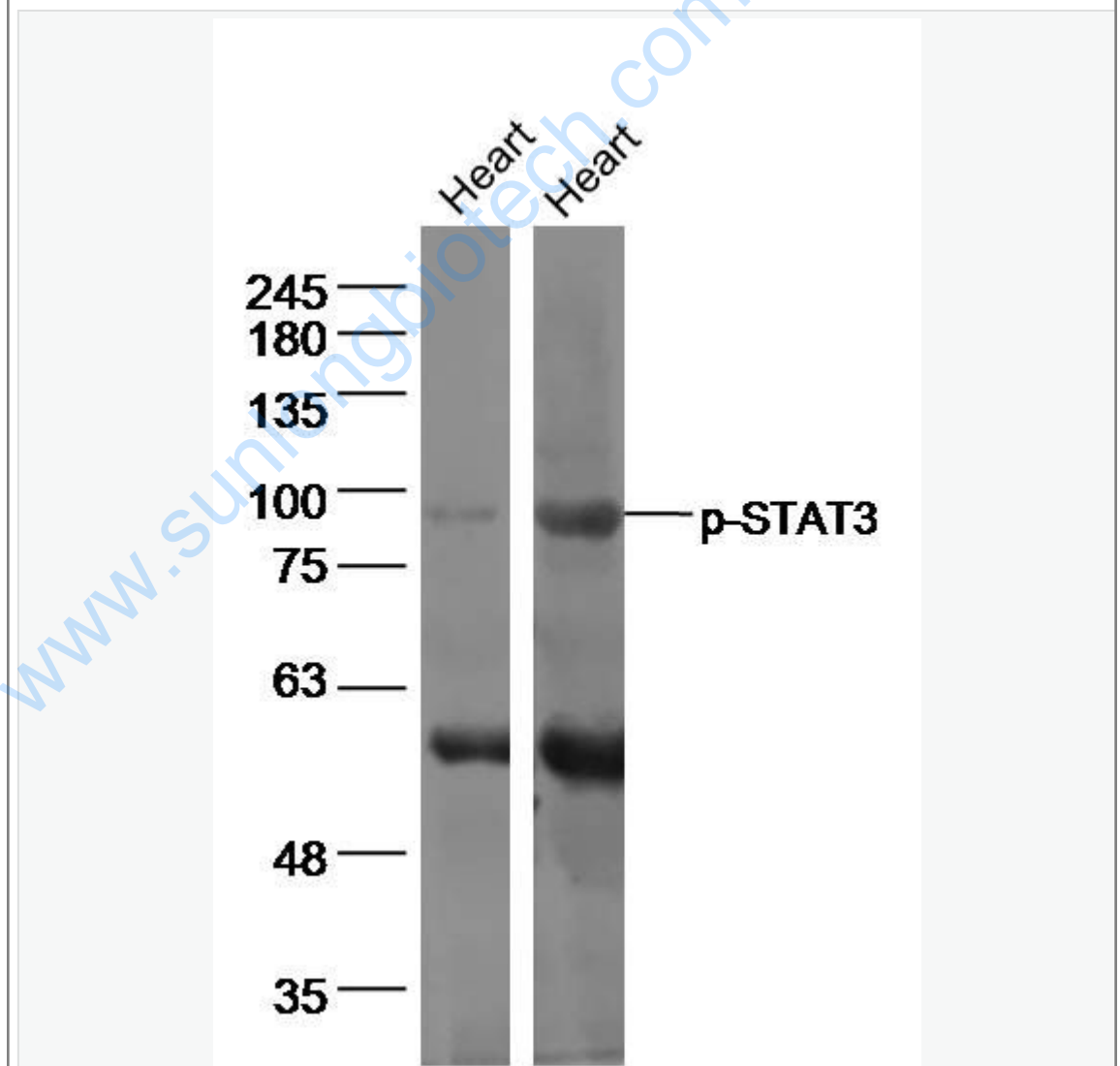
[Unigene: 463059](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

transcriptional regulatory factor (Transcription Regulators)

Picture:



Sample:

Heart (Mouse) Lysate at 40 ug

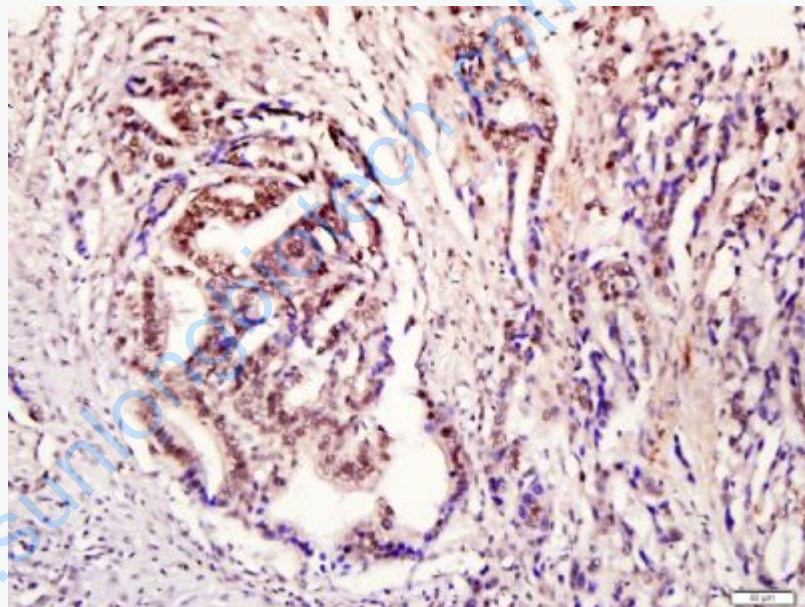
Heart (Rat) Lysate at 40 ug

Primary: Anti-p-STAT3 (SL1658R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 85 kD

Observed band size: 85 kD



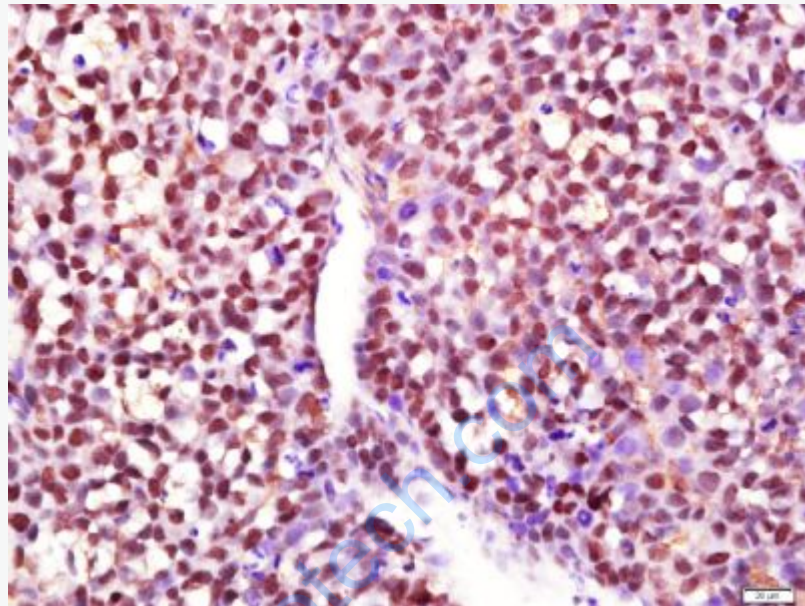
Tissue/cell: human gastric cancer; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

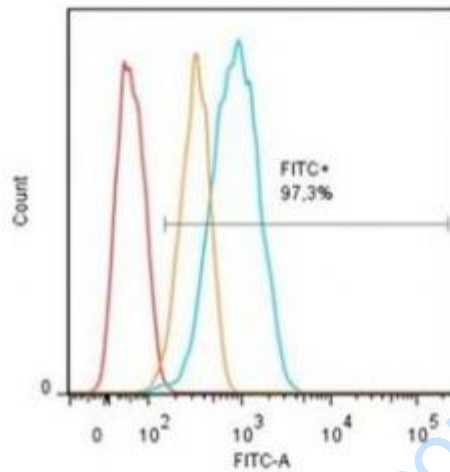
Incubation: Anti- phospho-STAT3 Polyclonal Antibody, Unconjugated(SL1658R)

1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-

0023) and DAB(C-0010) staining



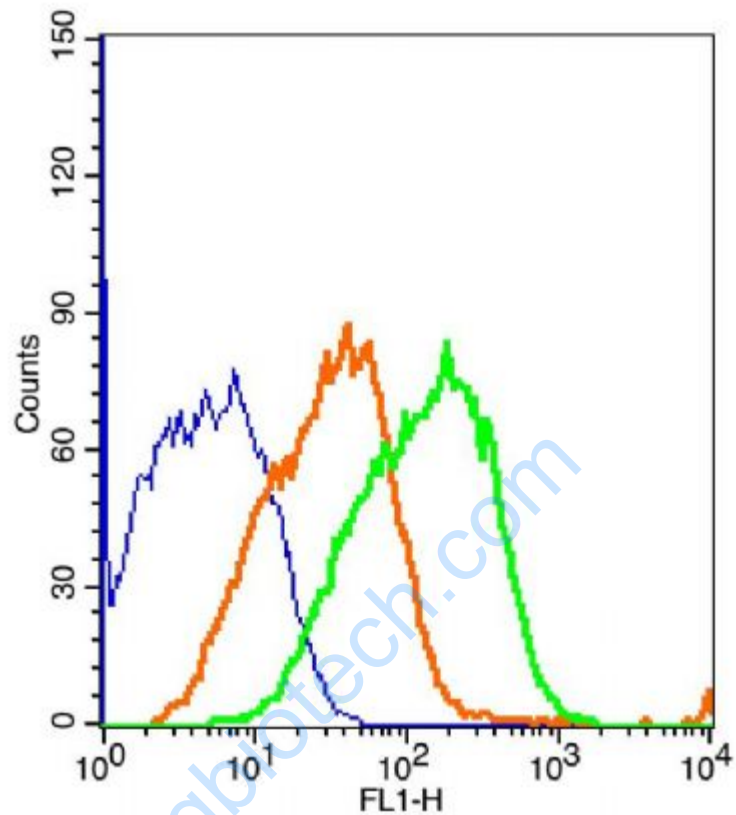
Paraformaldehyde-fixed, paraffin embedded (Transplantation tumor); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phosphorylated signal Transducer and Activator of Transcription 3; p-STAT3) Polyclonal Antibody, Unconjugated (SL1658R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.



Cell line: EST-02	
Red:	unstained control
Blue:	1 μl STAT-3 Ab (FI= 19.7)
Orange:	0,8 μl STAT-3 Ab (FI= 6.8)

This image has been kindly submitted by Tübingen Ageing and Tumour Immunology Group (TATI), Centre for Medical Research (ZMF), University of Tübingen Medical School [www.tati-group.de](http://www.tati-group.de) via our distributor Biozol.

Human Melanoma cell line, EST02, was stained with Rabbit Anti-phospho-STAT3 (Tyr705) Polyclonal Antibody, FITC Conjugated (SL1658R) for 30 minutes, on ice.



The blue histogram is unstained cells (mouse kidney).

The Orange histogram is cells stained with Rabbit IgG/FITC (SL1658R) isotype control antibody.

The green histogram is cells stained with Rabbit Anti-phospho-STAT3 (Tyr705)/FITC Conjugated antibody (SL1658R).

Concentration:  $2\mu\text{g}/10^6$  cells or  $5\mu\text{g}/10^6$  cells.