

Rabbit Anti-STAT3 antibody

SL1141R

Product Name:	STAT3
Chinese Name:	Signal transduction和转录激活因子3抗体
Alias:	1110034C02Rik; Acute Phase Response Factor; APRF; AW109958; DNA binding protein APRF; FLJ20882; HIES; MGC128731; MGC16063; MGC93551; Signal transducer and activator of transcription 3 (acute-phase response factor); Signal transducer and activator of transcription 3; Signal Transductor and Activator of Transcription 3; STAT 3; Transcription factor; STAT3 HUMAN.
	Specific References(4) SL1141R has been referenced in 4 publications.
	[IF=2.51] 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. WB;Pig.
	<u>PubMed:22729878</u>
	[IF=3.23]Lee E-J, Lee SJ, Kim J-H, Kim K-J, Yang S-H, Jeong K-Y, et al. (2016)
文献引用	Radiation Inhibits Interleukin-12 Production via Inhibition of C-Rel through the
Pub Med	Interleukin-6/ Signal Transducer and Activator of Transcription 3 Signaling Pathway in
	Dendritic Cells. PLoS ONE 11(1): e0146463. WB;Mouse .
	<u>PubMed:26745884</u>
	[IF=1.55]Song, Yan?Yan, et al. "STAT3, p?STAT3 and HIF?1α are associated with
	vasculogenic mimicry and impact on survival in gastric adenocarcinoma."Oncology
	letters 8.1 (2014): 431-437. IHC-P;Human .
	PubMed:24959290
	[IF=0.00]栗林沙弥. "Studies on the pathogenesis of avian influenza in chickens."
	(2014).WB;Chicken.

	PubMed:000
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit, Sheep, Guinea Pig,
	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3μg/TestIF=1:100-
Applications:	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	88kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human STAT3:233-330/770
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
Storage:	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.
PubMed:	<u>PubMed</u>
Product Detail:	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] Subunit:
	Forms a homodimer or a heterodimer with a related family member (at least STAT1). Interacts with IL31RA, NCOA1, PELP1, SIPAR, SOCS7, STATIP1 and TMF1. Interacts with HCV core protein. Interacts with IL23R in presence of IL23. Interacts (via SH2 domain) with NLK. Interacts with ARL2BP; the interaction is enhanced by LIF and JAK1 expression (By similarity). Interacts with KPNA4 and KPNA5; KPNA4 may be the primary mediator of nuclear import (By similarity). Interacts with CAV2; the interaction is increased on insulin-induced tyrosine phosphorylation of CAV2 and leads to STAT3 activation (By similarity). Interacts with ARL2BP; interaction is enhanced with ARL2. Interacts with NEK6 (By similarity). Binds to CDK9 when activated and nuclear. Interacts with BMX. Interacts with ZIPK/DAPK3. Interacts with PIAS3; the

interaction occurs on stimulation by IL6, CNTF or OSM and inhibits the DNA binding activity of STAT3. In prostate cancer cells, interacts with STAT3 and promotes DNA binding activity of STAT3. Interacts with STMN3, antagonizing its microtubule-destabilizing activity.

Subcellular Location:

Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm. Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to signaling by activated FGFR1, FGFR2, FGFR3 or FGFR4. 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. Identified in a complex with LYN and PAG1.

Tissue Specificity:

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

Similarity:

Belongs to the transcription factor STAT family.

Contains 1 SH2 domain.

SWISS: P40763

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Gene ID:

6774

Database links:

Entrez Gene: 6774Human

Entrez Gene: 20848Mouse

Entrez Gene: 25125Rat

Omim: 102582Human

SwissProt: P40763Human

SwissProt: P42227Mouse

SwissProt: P52631Rat

Unigene: 463059Human

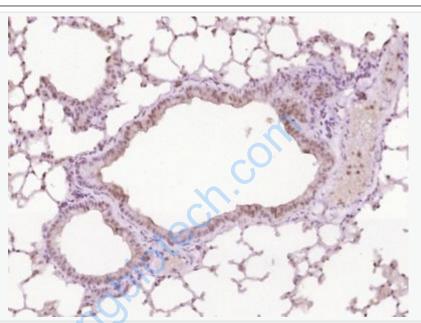
Important Note:

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

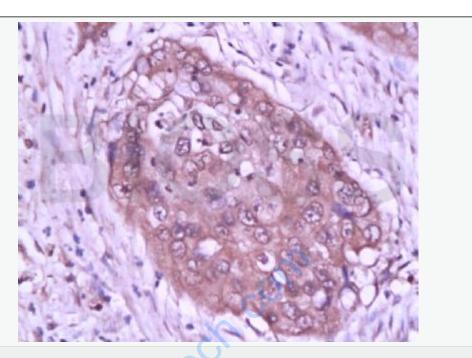
Stat3在Cell

differentiation、增殖、凋亡等方面有着重要生理作用。有学者认为:STAT-3对Tumour有一定的抑制作用,由于其与Tumour的关系较为密切,越来越受到人们的重视。



Picture:

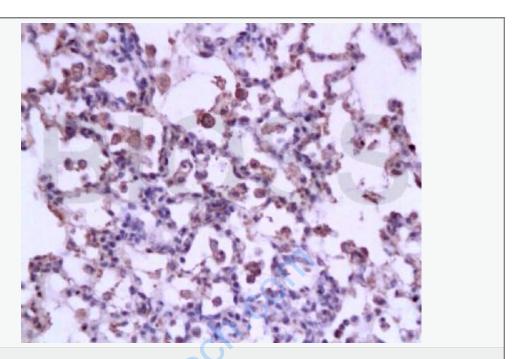
Paraformaldehyde-fixed, paraffin embedded (Mouse lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (STAT3) Polyclonal Antibody, Unconjugated (SL1141R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human cervical cancer; 4% Paraformaldehyde-fixed and paraffinembedded;

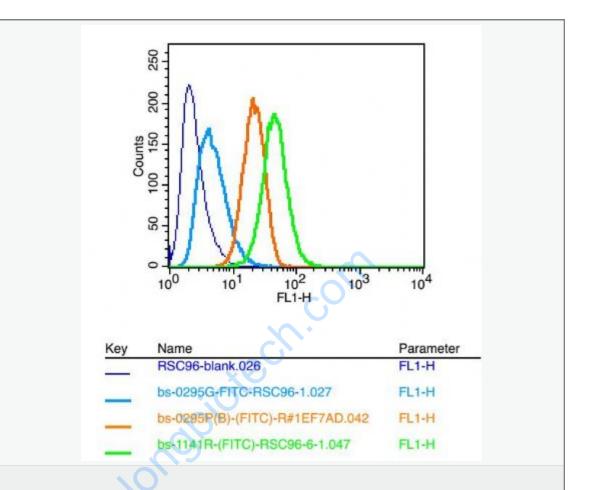
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-STAT3 Polyclonal Antibody, Unconjugated(SL1141R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat lung tissue; 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-STAT3 Polyclonal Antibody, Unconjugated(SL1141R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Positive control: RSC96

Isotype Control Antibody: Rabbit IgG; Secondary Antibody: Goat anti-rabbit IgG-

FITC; Dilution: 1:200 in 1 X PBS containing 0.5% BSA

Primary Antibody catalog number: bs-1141R; Dilution: 3µg in 100 µl 1X PBS

containing 0.5% BSA