SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-STAT2 antibody

Catalog Number: SL1140R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	STAT2
Immunogen:	KLH conjugated synthetic peptide derived from human STAT2: 151-250/851
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	IHC-P=1:100-500 IHC-F=1:100-500 IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human, Rat, (predicted: Mouse)
Predicted MW.:	97kDa
Subcellular Location:	The nucleus cytoplasmic
Background:	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. In response to interferon (IFN), this protein forms a complex with STAT1 and IFN regulatory factor family protein p48 (ISGF3G), in which this protein acts as a transactivator, but lacks the ability to bind DNA directly. Transcription adaptor P300/CBP (EP300/CREBBP) has been shown to interact specifically with this protein, which is thought to be involved in the process of blocking IFN-alpha response by adenovirus. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010]. **Function:** Signal transducer and activator of transcription that mediates

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	signaling by type I IFNs (IFN-alpha and IFN-beta). Following type I IFN binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize, associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state. **Subunit:** Interacts with ISGF3G/IRF-9 in the cytoplasm. Heterodimer with STAT1 upon IFN-alpha/beta induced phosphorylation. Interacts with CRSP2 and CRSP6. Interacts with Simian virus 5 protein V and rabies virus phosphoprotein (By similarity). Can form a homodimer upon IFN-alpha induced phosphorylation. Interacts with IFNAR1; the interaction requires the phosphorylation of IFNAR1 at 'Tyr-466'. Interacts with IFNAR2. Interacts with dengue virus NS5; this interaction inhibits the phosphorylation of STAT2, and, when all viral proteins are present (polyprotein), targets STAT2 for degradation. Interacts with human cytomegalovirus/HHV-5 protein UL123; this interaction promotes viral growth. **Subcellular Location:** Cytoplasm. Nucleus. Note=Translocated into the nucleus upon activation by IFN-alpha/beta. **Post-translational modifications:** Tyrosine phosphorylated in response to IFN-alpha. **Similarity:** Belongs to the transcription factor STAT family. Contains 1 SH2 domain. **Database links:** **Entrez Gene:** 6773 Human **Entrez Gene:** 20847 Mouse **Entrez Gene:** 288774 Rat Omim: 600556 Human **SwissProt:** P52630 Human **SwissProt:** Q9WVL2 Mouse **Unigene:** 530595 Human **Unigene:** 293120 Mouse **Unigene:** 471333 Mouse **Unigene:** 24237 Rat transcriptional regulatory factor（Transcriptin Regulators） The STAT (Signal Transducer and Activator of Transcription) protein family is a class of transcription factors discovered in recent years. Through the JAK-STAT pathway, they mediate many responses induced by cell factors and participate in cellular signal transduction and transcription.

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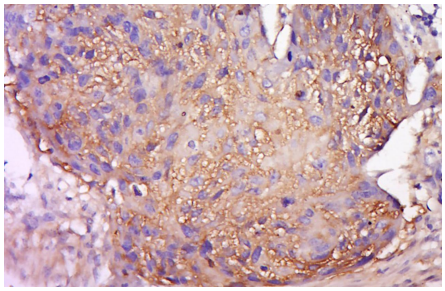
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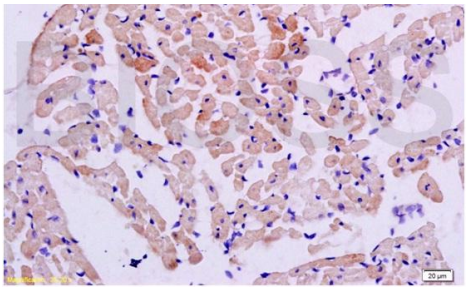
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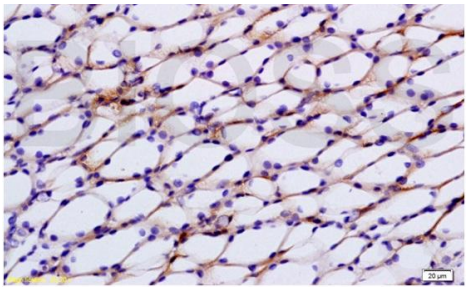
[VALIDATION IMAGES]



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, 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-STAT2 Polyclonal Antibody, Unconjugated(SL1140R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat heart tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, 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-STAT2 Polyclonal Antibody, Unconjugated(SL1140R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, 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-STAT2 Polyclonal Antibody, Unconjugated(SL1140R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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