

## Phospho-STAT1 (Tyr701) Polyclonal Antibody

Catalog No. E-AB-20981

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

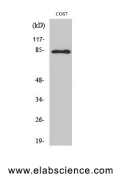
### Description

<b>Reactivity</b>	Human, Mouse, Rat, Monkey
<b>Immunogen</b>	Synthesized peptide derived from human Stat1 around the phosphorylation site of Tyr701
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Conjugation</b>	Unconjugated
<b>Buffer</b>	PBS with 0.02% sodium azide, 0.5% protective protein and 50% glycerol, pH7.4

### Applications Recommended Dilution

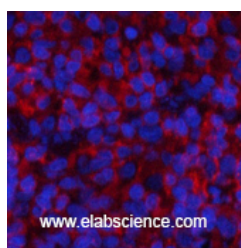
<b>WB</b>	1:500-1:2000
<b>IHC</b>	1:100-1:300
<b>IF</b>	1:100-1:300

### Data

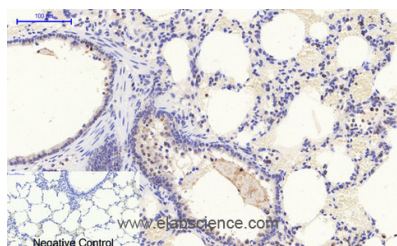


Western Blot analysis of COS-7 cells with Phospho-Stat1 (Tyr701) Polyclonal Antibody at dilution of 1:1000

**Observed Mw:87kDa**  
**Calculated Mw:87kDa**



Immunofluorescence analysis of Rat spleen tissue with Phospho-Stat1 (Tyr701) Polyclonal Antibody at dilution of 1:200



Immunohistochemistry of paraffin-embedded Rat lung tissue with Phospho-Stat1 (Tyr701) Polyclonal Antibody at dilution of 1:200

### For Research Use Only

## Preparation & Storage

**Storage**                      Store at -20°C. Avoid freeze / thaw cycles.

## Background

Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN-alpha and IFN-beta) 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. In response to type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated. It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrates into the nucleus and binds to the IFN gamma activated sequence (GAS) to drive the expression of the target genes, inducing a cellular antiviral state.

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