

**Product:** Anti-STAT1a  
**Catalog #:** 12-1021  
**Amount:** 25 mg

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**CATEGORY:**  
**DESCRIPTION:**

**Rabbit** Polyclonal

STATs (signal transducers and activators of transcription) are a family of cytoplasmic latent transcription factors that are activated to regulate gene expression in response to a large number of extracellular signaling poly peptides including cytokine, interferons and growth factors.

After phosphorylation by JAK tyrosine kinases, STATs enter the nucleus to regulate transcription of many different genes. Among the seven STATs (Stat1, Stat2, Stat3, Stat4, Stat5a, Stat5b, and Stat6), Stat1, Stat3, Stat5a, and Stat5b have a wide activation profile. STAT 1 is activated by many different ligands including IFN family (IFN- $\alpha$ , IFN- $\beta$ , IFN- $\gamma$ , and IL-10), gp130 family (IL-6, IL-11, LIF, CNTF, and G-CSF), and receptor tyrosine kinases (EGF, PDGF, and CSF-1). STAT1 has two forms, the 91kDa STAT1 $\alpha$  and the 84 kDa STAT1 $\beta$ , which are encoded by the same gene with splicing variant.

**FORM:**  
**IMMUNOGEN:**

Purified Ig Fraction in PBS containing 0.02% Sodium Azide  
A peptide corresponding to amino acids 712 to 750 of human STAT1 $\alpha$ . The sequences differ from murine corresponding sequences by four amino acids.

**APPLICATION:**

Immunoblotting (min. dilution 1:500)  
Immunoprecipitation (2-4 $\mu$ g per sample)

**REACTIVITY/SPECIES:**  
**RECOMMENDED FOR**  
**POSITIVE CONTROL:**

Human, Mouse

**STORAGE:**

HeLa whole cell lysate, Jurkat, or A431 cells  
2-8°C for immediate use, or at -20°C (aliquot)

**12-1021P Blocking peptide available**

**REFERENCES:**

Leonard, WJ & O'Shea, JJ. (1998) Annu Rev Immunol **16**: 293-322  
Darnell, JE Jr. (1997) Science **277**: 1630-1635

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