

STAT1

Mouse Anti-Human Signal Transducer and Activator of Transcription 1 Clone SAT-84 mAb

Catalog No.	CSI14454	Quantity:	25 µg
	CSI14455		100 µg

Alternate Names: Signal transduction and activator of transcription-1, STAT-1

Description: STAT1, also known as signal transduction and activator of transcription-1, is a ubiquitously expressed cytoplasmic protein that becomes phosphorylated in response to cytokine signaling (interferon α , interferon γ , EGF, PDGF, and IL-6) by receptor-associated kinases and translocates to the nucleus to act as a transcriptional activator. Two isoforms of STAT1 exist as a result of alternative RNA processing with apparent molecular weights of 88 and 91 kD. STAT1 has been shown to interact with a number of proteins including STAT3, FAK, MCM3, MCM5, TRADD, BRCA1, KIT, IL-27 receptor, IL-2R β and γ , IFN α R β , STAT2, c-Src, and many others. STAT1 knockout mice are highly sensitive to infection with microbial infections and viruses. The SAT-84 monoclonal antibody recognizes human STAT1 and has been shown to be useful for Western blotting.

Concentration: 0.5 mg/ml

Gene ID: 6772

Structure: STAT family, homo- and heterodimers, two isoforms from differentially processed RNA, 84 and 91 kD.

Distribution: Ubiquitous cytoplasmic expression

Host: Mouse

Immunogen: STAT1 peptide QLDSKFLEQVHQLYD

Isotype: IgG1, κ

Clone: SAT-84

Function: Phosphorylated in response to cytokine signaling by receptor-associated kinases, translocates to nucleus to act as transcriptional activator. Mediates responses to interferon α , interferon γ , EGF, PDGF, and IL-6.

Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml. **Precaution:** Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.

Purification: The antibody was purified by protein G affinity chromatography



Modification: STAT3, FAK, MCM3, MCM5, TRADD, BRCA1, KIT, IL-27 receptor, IL-2R β and γ , IFN α R β , STAT2, c-Src, many others.

Reactivity: Human

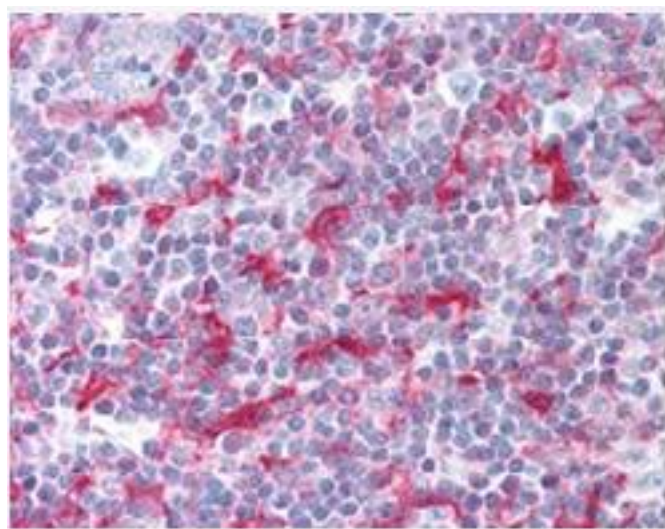
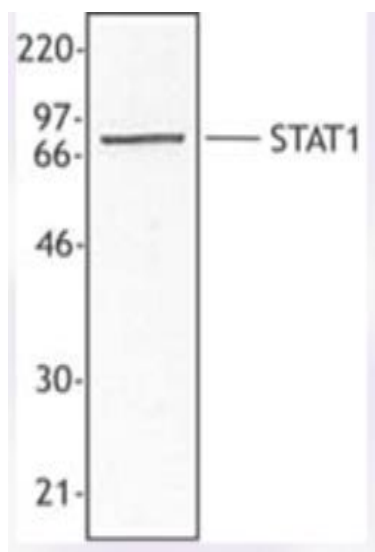
Applications: WB, IHC

Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 2-4 μ g/ml working concentration of antibody in 5% BSA for each mini-gel. For IHC, use a 15 μ g/ml dilution of antibody for staining. Antigen retrieval for IHC of formalin-fixed paraffin-embedded tissue using 0.01 M sodium citrate buffer is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

Storage & Stability: Upon receipt, store undiluted at 4° C.

Jurkat cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with mouse monoclonal antibody against STAT1. Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.

Formalin-fixed paraffin-embedded human tonsil tissue was stained with SAT-84 at 15 μ g/ml and developed with an alkaline phosphatase chromogen substrate (red color). Tissue was counterstained with H&E (blue/pink). Magnification, 40X.



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