

## **Product datasheet for TA392571S**

## OriGene Technologies, Inc.

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## **STAT1 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WB

Recommended Dilution: WB:1:500~1:1000 IF: 1:50~1:200 IHC:1:50~1:200 IP: 1:50~1:200

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 680-720 of Human Stat1.

**Specificity:** Stat1 polyclonal antibody detects endogenous levels of Stat1 protein.

Formulation: Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

Predicted Protein Size: ~ 87 kDa

**Gene Name:** signal transducer and activator of transcription 1

**Database Link:** Entrez Gene 6772 Human

P42224

**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.



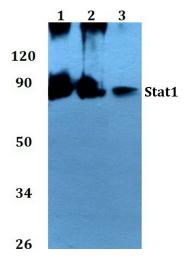


Synonyms: Signal transducer and activator of transcription 1-alpha/beta; STAT1; STAT1α; STAT1β;

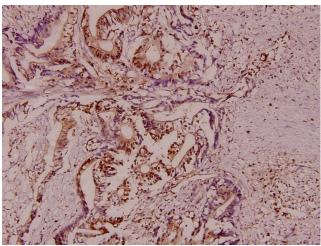
Transcription factor ISGF-3 components p91/p84

**Note:** For research use only, not for use in diagnostic procedure.

## **Product images:**

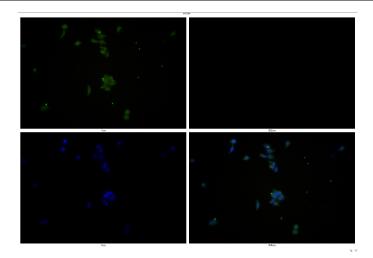


Western blot (WB) analysis of Stat1 polyclonal antibody at 1:1000 dillution Lane1:NIH-3T3 ) whole cell lysate(40µg) Lane2:NIH-3T3 treated with UV(4h) whole cell lysate(40µg) Lane3:NIH-3T3 treated with PMA(60ng/ml, 30min) whole cell lysate(40µg) Lane4:Hela whole cell lysate(40µg) Lane5:Hela treated with IFN-y (100ng/ml,15min) whole cell lysate(40µg) Lane6:Hela treated with PMA(60ng/ml, 30min) whole cell lysate(40µg)

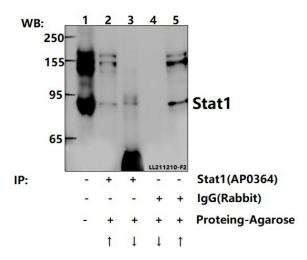


Immunohistochemistry (IHC) analyzes of Stat1 pAb in paraffin-embedded human colorectal cancer carcinoma tissue at 1:100.





Immunofluorescence analysis of MCF-7 cells using Stat1 antibody at dilution of 1:50.



Immunoprecipitation of HEK293T cell lysates using Stat1 pAb (Sepharose Bead Conjugate)#BD0048 (lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate)#BD0048 (lane 4 and lane 5) .Lane 1 is 30% input. The western blot was probed using Stat1 pAb #[TA392571].