

## **Product datasheet for TA500542M**

# OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### STAT1 Mouse Monoclonal Antibody [Clone ID: OTI4H9]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI4H9
Applications: IF, WB

**Recommended Dilution:** WB 1:1000~2000, IHC 1:50, IF 1:50~100

Reactivity: Human, Dog, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human STAT1 (NP\_009330) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.7 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 82.9 kDa

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

Database Link: NP 644671

Entrez Gene 20846 MouseEntrez Gene 25124 RatEntrez Gene 488449 DogEntrez Gene 693650

MonkeyEntrez Gene 6772 Human

P42224





#### 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. This protein can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. Two alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq]

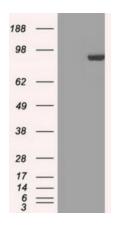
Synonyms: CANDF7; IMD31A; IMD31B; IMD31C; ISGF-3; STAT91

**Protein Families:** Druggable Genome, Transcription Factors

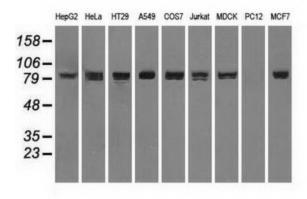
**Protein Pathways:** Chemokine signaling pathway, Jak-STAT signaling pathway, Pancreatic cancer, Pathways in

cancer, Toll-like receptor signaling pathway

## **Product images:**

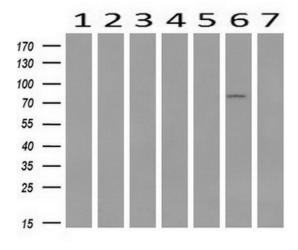


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY STAT1 (Cat# [RC213858], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-STAT1 ([TA500542]).

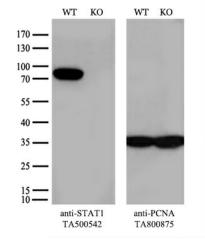


Western blot analysis of extracts (35ug) from 9 different cell lines by usin g anti-STAT1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:1000).

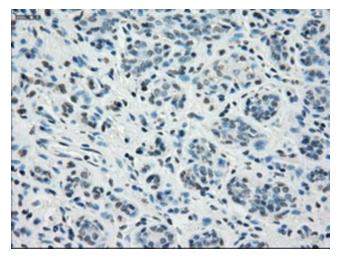




Western blot analysis of extracts (10ug) from 7 Human tissue by using anti-STAT1 monoclonal antibody (1: Uterus; 2: Breast; 3: Brain; 4: Liver; 5: Ovary; 6: Thyroid gland; 7: colon) at 1:200 dilution.

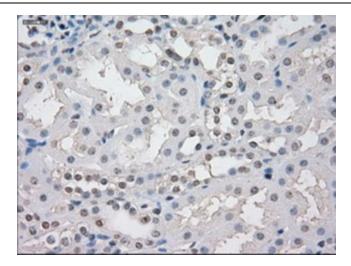


Equivalent amounts of cell lysates (10 ug per lane) of wild-type A549 cells and STAT1-Knockout A549 cells (KO, Cat# [LC806225]) were separated by SDS-PAGE and immunoblotted with anti-STAT1 monoclonal antibody [TA500542] (1:500). Then the blotted membrane was stripped and reprobed with anti-PCNA antibody as a loading control.

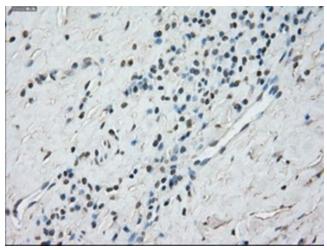


Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-STAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

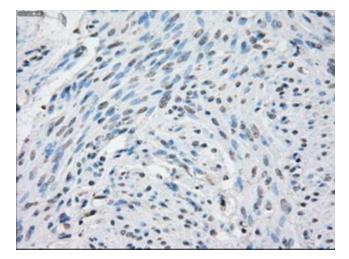




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-STAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

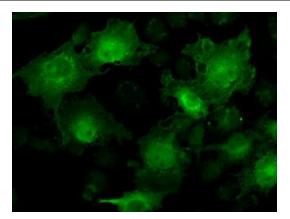


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-STAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

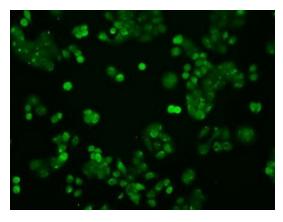


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-STAT1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.





Anti-STAT1 mouse monoclonal antibody ([TA500542]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY STAT1 ([RC201075]) (1:100).



Immunofluorescent staining of HT29 cells using anti-STAT1 mouse monoclonal antibody ([TA500542]) (1:50).