

Basic Information

Product Name	Anti-STAT1 Antibody (Clone#12C7)	
Gene Name	STAT1	
Source	Mouse	
Clonality	Monoclonal	
Isotype	IgG1	
Species Reactivity	human, monkey	
Tested Application	WB, IHC, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human STAT1 recombinant protein (Position: S2-A230). Human STAT1 shares 91.2% amino acid (aa) sequence identity with mouse STAT1.	
Concentration	200ug/ml	
Purification	protein G purified.	
Observed MW	91 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Signal transducer and activator of transcription 1 (STAT1) is a transcription factor which in humans is encoded by the STAT1 gene. 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.

Reference

Anti-STAT1 Antibody (Clone#12C7)被引用在5文献中。

Selected Validation Data

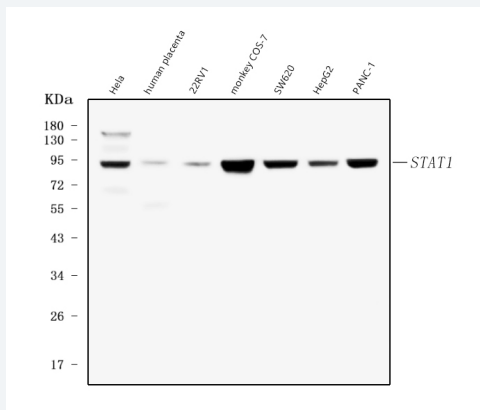


Figure 1. Western blot analysis of STAT1 using anti-STAT1 antibody (M00036-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human placenta tissue lysates,

Lane 3: human 22RV1 whole cell lysates,

Lane 4: monkey COS-7 whole cell lysates,

Lane 5: human SW620 whole cell lysates,

Lane 6: human HepG2 whole cell lysates,

Lane 7: human PANC-1 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-STAT1 antigen affinity purified monoclonal antibody (M00036-2) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for STAT1 at approximately 91 kDa. The expected band size for STAT1 is at 87 kDa.

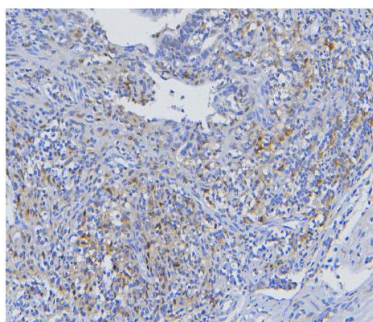


Figure 2. IHC analysis of STAT1 using anti-STAT1 antibody (M00036-2).

STAT1 was detected in a paraffin-embedded section of human intestinal cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-STAT1 Antibody (M00036-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1022) as the chromogen.

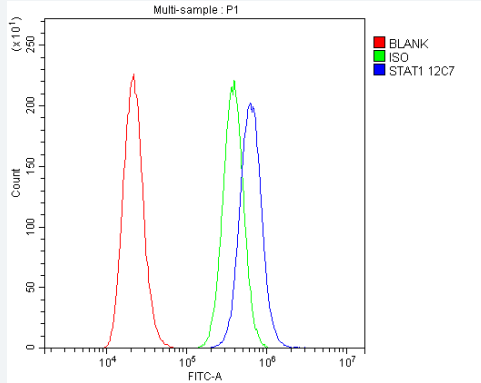


Figure 6. Flow Cytometry analysis of A431 cells using anti-STAT1 antibody (M00036-2).

Overlay histogram showing A431 cells stained with M00036-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-STAT1 Antibody (M00036-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.