

Basic Information

Product Name	Anti-STAT1 Antibody (Clone#12C7)	
Gene Name	STAT1	
Source	Mouse	
Isotype	IgG1	
Species Reactivity	human, monkey	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	200ug/ml antibody with PBS , 0.02% NaN ₃ , 1mg 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	91KD(Alpha)/84KD(Beta)	
Dilution Ratios	Western blot(WB):	1:500-2000
	Immunohistochemistry in paraffin section (IHC):	1:50-400
	Immunocytochemistry in fixed cells:	1:50-400
	Flow cytometry (FCM):	1-3 μ g/1x10 ⁶ cells
	(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.

Selected Validation Data

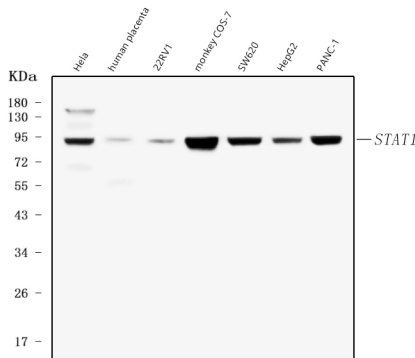


Figure 1. Western blot analysis of anti- STAT1 antibody (M00036-2).The sample well of each lane was loaded with 50ug of sample under reducing conditions.

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.Use rabbit anti- STAT1 1:1000, probed with a goat anti-mouse IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for STAT1 at approximately 91KD. The expected band size for STAT1 is at 87KD.

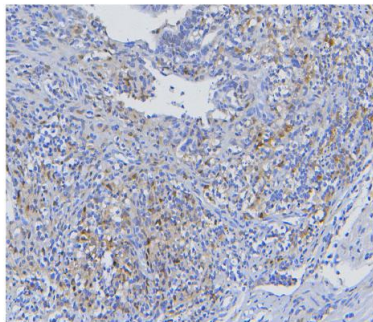


Figure 2.IHC analysis using anti- STAT1 antibody (M00036-2). detected in paraffin-embedded section of human intestinal cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

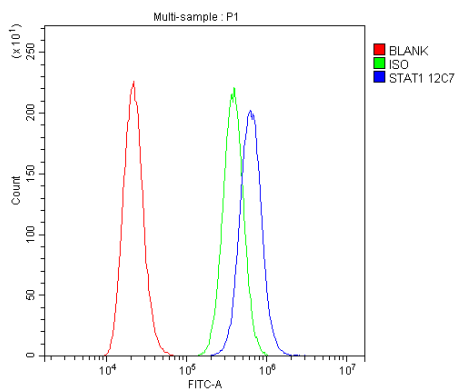


Figure 6.Flow cytometry analysis of A431 cell (1x10⁶) DyLight 488 conjugated goat anti-mouse IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was mouse IgG DyLight 488. Unlabelled sample (Red line).