

Basic Information

Product Name	Anti-STAT1 Antibody	
Gene Name	STAT1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human STAT1, different from the related mouse sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	84, 91 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

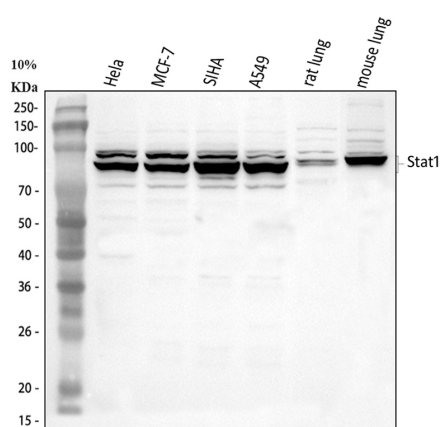
Storage

12 months from date of receipt, -20°C as supplied.

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



Western blot analysis of STAT1 using anti-STAT1 antibody (BA0619).

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 MCF-7 whole cell lysates,

Lane 3: human SiHa whole cell lysates,

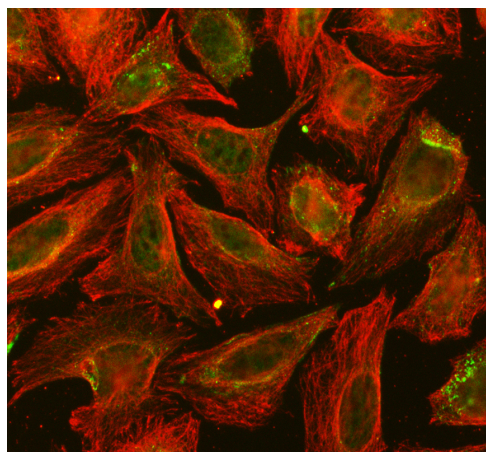
Lane 4: human A549 whole cell lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse lung tissue lysates.

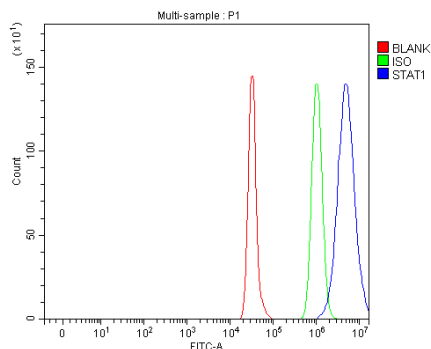
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-STAT1 antigen A03957-Aen affinity purified polyclonal antibody (BA0619) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for STAT1 at approximately 84, 91 kDa. The expected band size for STAT1 is at 87, 84 kDa.



ICC/IF analysis of STAT1 using anti-STAT1 antibody (BA0619) and anti-Alpha Tubulin antibody (M03989-3).

STAT1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-STAT1 Antibody (BA0619) at a dilution of 1:100. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green) (Catalog # BA1127) and Cy3-conjugated Anti-mouse IgG Secondary Antibody (red) (Catalog # BA1031) were used as secondary antibody.



Flow Cytometry analysis of A549 cells using anti-STAT1 antibody (BA0619).

Overlay histogram showing A549 cells stained with BA0619 (Blue line). To facilitate intrMyelin basic protein/MBPIllular 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 rabbit anti-STAT1 Antibody (BA0619) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit 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.