

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% NaN ₃ , 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	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. 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被引用在3文献中。

Selected Validation Data

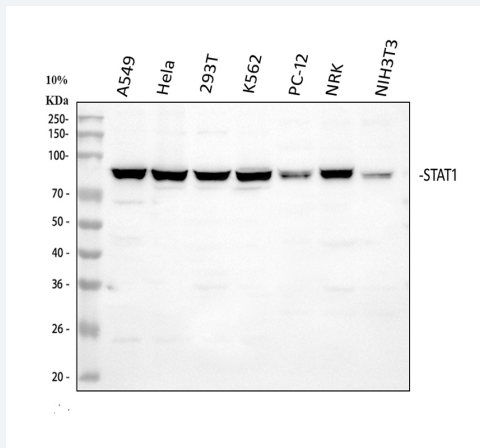


Figure 1. Western blot analysis of STAT1 using anti-STAT1 antibody (BA0619). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,

Lane 2: human HeLa whole cell lysates,

Lane 3: human 293T whole cell lysates,

Lane 4: human K562 whole cell lysates,

Lane 5: rat PC-12 whole cell lysates,

Lane 6: rat NRK whole cell lysates,

Lane 7: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-STAT1 antigen 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 87 kDa. The expected band size for STAT1 is at 87 kDa.

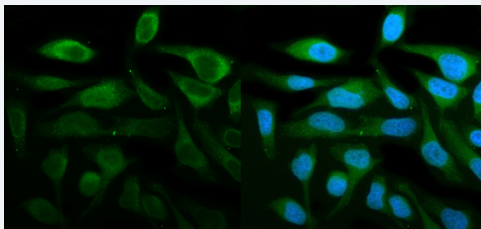


Figure 2. IF analysis of STAT1 using anti-STAT1 antibody (BA0619).

STAT1 was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-STAT1 Antibody (BA0619) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

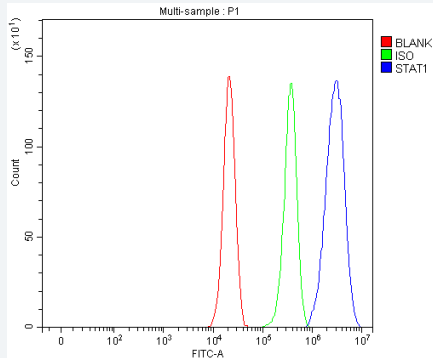


Figure 3. Flow Cytometry analysis of A549 cells using anti-STAT1 antibody (BA0619).

Overlay histogram showing A549 cells stained with BA0619 (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 rabbit anti-STAT1 Antibody (BA0619) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.