

Anti-STAT1 Rabbit Monoclonal Antibody

Catalog Number: M00036-1

About STAT1

Phosphoinositide-3-kinase (PI3K) that phosphorylates PtdIns (Phosphatidylinositol), PtdIns4P (Phosphatidylinositol 4-phosphate) and PtdIns (4,5) P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3) . PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Participates in cellular signaling in response to various growth factors.

Overview

Product Name	Anti-STAT1 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-STAT1 Rabbit Monoclonal Antibody catalog # M00036-1. Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.
Application	Flow Cytometry, IP, IHC, WB
Clonality	Monoclonal BEE-19
Formulation	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P42224

Technical Details

Immunogen	A synthesized peptide derived from human STAT1
Isotype	Rabbit IgG
Form	Liquid
Concentration	Actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity-chromatography
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

WB 1:1000-1:2000

IHC 1:50-1:200

IP 1:50

FC 1:50

Anti-STAT1 Rabbit Monoclonal Antibody (M00036-1) Images

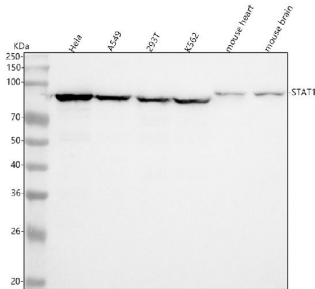


Figure 1. Western blot analysis of STAT1 using anti-STAT1 antibody (M00036-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. 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 A549 whole cell lysates,
Lane 3: human 293T whole cell lysates,
Lane 4: human K562 whole cell lysates,
Lane 5: mouse heart tissue lysates,
Lane 6: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-STAT1 antigen affinity purified monoclonal antibody (Catalog # M00036-1) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for STAT1 at approximately 83, 88 kDa. The expected band size for STAT1 is at 83, 88 kDa.

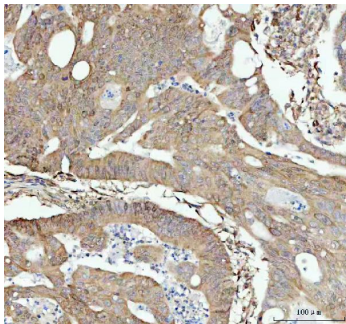


Figure 2. IHC analysis of STAT1 using anti-STAT1 antibody (M00036-1).

STAT1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STAT1 Antibody (M00036-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

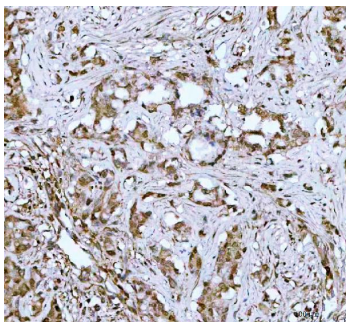


Figure 3. IHC analysis of STAT1 using anti-STAT1 antibody (M00036-1).

STAT1 was detected in a paraffin-embedded section of human lung adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STAT1 Antibody (M00036-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

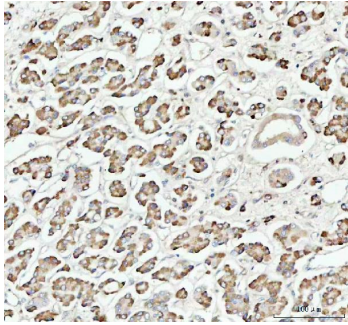


Figure 4. IHC analysis of STAT1 using anti-STAT1 antibody (M00036-1).
STAT1 was detected in a paraffin-embedded section of human liver adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-STAT1 Antibody (M00036-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

2 Publications Citing This Product

1. PubMed ID: 28903386, Synergistic inhibition of colon cancer growth by the combination of methylglyoxal and silencing of glyoxalase I mediated by the STAT1 pathway
2. PubMed ID: 17696225, Hepatitis C virus non-structural 5A abrogates signal transducer and activator of transcription-1 nuclear translocation induced by IFN-alpha through dephosphorylation.

Visit bosterbio.com/anti-stat1-rabbit-monoclonal-antibody-m00036-1-boster.html to see all 2 publications.

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