

Anti-STAT1 Purified Monoclonal Antibody

Catalog Number: M00036-3

About STAT1

STAT1 (signal transducer and activator of transcription 1) is a transcription factor that plays important roles in growth arrest, apoptosis promoting and tumour suppression. After ligation of cytokine receptors STAT1 becomes phosphorylated on Tyr701 by Janus kinase JAK1 or JAK2, dimerizes, translocates to nucleus and contacts DNA. STAT1-STAT2 heterodimers serve as more potent transcriptional inducers than STAT1 homodimers. STAT1 is also phosphorylated on Ser727 by MAPK pathway, independently of tyrosine phosphorylation. However, the both modifications are important for its maximal transcriptional activity. On the other hand, STAT1 phosphorylated on Ser727 is targeted for proteasomal degradation.

Overview

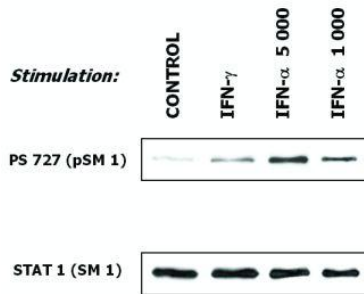
Product Name	Anti-STAT1 Purified Monoclonal Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-STAT1 Purified Monoclonal Antibody (Catalog# M00036-3). Tested in IP, WB, IHC-P application(s). This antibody reacts with Mouse, Human.
Application	IP, IHC-P, WB
Clonality	Monoclonal SM1
Formulation	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage Instructions	Store at 2-8°C. Do not freeze.
Host	Mouse
Uniprot ID	P42224

Technical Details

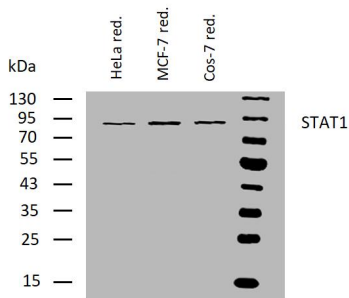
Immunogen	STAT1 peptide sequence 721-733 (DNLLPMSPEEFDE). The antibody SM1 recognizes an epitope included within amino acids 721-733 of STAT1, a 91 kDa transcriptional factor involved in a variety of systems including antiviral responses and interferon alpha (IFN-alpha) and gamma (IFN-gamma) signal transduction.
Predicted Reactive Species	Primate
Isotype	Mouse IgG2b
Form	Liquid
Concentration	1 mg/ml
Purification	Purified by protein-A affinity chromatography.
Suggested Dilutions	Immunohistochemistry (paraffin sections): 5 ug/ml; positive tissue: lung macrophages.

Western blotting: 1-2 ug/ml.

Anti-STAT1 Purified Monoclonal Antibody (M00036-3) Images



Detection of Human phosphorylated STAT1[p Ser727] and total STAT1 by Western Blot. Western blot shows lysate of human malignant melanoma cells (short-term culture derived from a patient) in response to interferon treatment to induce phosphorylation of STAT1 at Ser727. Subconfluent cells were serum-starved before exposure to activation dosages of IFN-gamma (10 ng/ml) and IFN-alpha (1000 IU/ml and 5000 IU/ml). Specific band was detected for phosphorylated STAT1[Ser727] by the antibody PSM1 (upper panel) and total STAT1 level by the antibody SM1 (lower panel).



Western blotting analysis of human STAT1 using mouse monoclonal antibody SM1 on lysates of HeLa, MCF-7, and Cos-7 cell lines under reducing conditions. Nitrocellulose membrane was probed with 2 μ g/ml of mouse monoclonal antibody anti-STAT1 followed by IRDye800-conjugated anti-mouse secondary antibody. STAT1 was detected at approximately 90 kDa.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-STAT1 Purified Monoclonal Antibody

For Research Use Only. Not for use in diagnostic procedures.