

Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - 200-301-A45S

Code: 200-301-A45S

Size: 25 µL

Product Description: Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - 200-301-A45S

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Mouse
Gene Name	STAT5A
Species Reactivity	human, mouse, rat
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Synonyms	mouse anti-STAT5 pY694 Antibody, MGF antibody, Signal Transducer and Activator of Transcription 5A antibody, STAT 5 antibody
Application Note	Phospho STAT5 pY694 monoclonal antibody is suitable for Immunofluorescence microscopy, ELISA, immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 91 kDa in size corresponding to phosphorylated Stat5a protein by western blotting in the appropriate cell lysate or extract. This phospho-specific monoclonal antibody reacts with mouse Stat5a pY694 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide.
Background	Signal transducer and activator of transcription 5 (Stat5) belongs to a family of cytoplasmic transcription factors that can be activated (phosphorylated) by a cell surface receptor. Phosphorylation at Tyr694 is obligatory for Stat5 activation. Stat5 has two isoforms, Stat5 alpha and Stat5 beta. Aberrant Stat5 activation has been implicated in the pathogenesis of chronic myelogenous leukemia, prostate and breast cancer and tumor metastasis. Stat5 is localized in the cytoplasm and upon phosphorylation at Y694 is translocated to the nucleus. Ideal for Cancer, Chromatin & Nuclear Signaling and Signal Transduction research.
Purity And Specificity	Phospho STAT5 pY694 Antibody was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for mouse Stat5a protein phosphorylated at Y694. A BLAST analysis was used to suggest cross-reactivity with Stat5a from human, mouse and rat based on 100% homology with the immunizing sequence. Cross-reactivity with Stat5a from other sources has not been determined.
Assay Dilutions	User Optimized
ELISA	1:20,000
Western Blot	1:500 - 1:2,000
Immunohistochemistry	20-40 µg/ml
IF Microscopy	1:50 - 1:1,000
Other Assays	User Optimized
Expiration	Expiration date is three (3) months from date of opening.
Immunogen	Anti-STAT5 phospho Y694 monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding Y694 of mouse STAT5a protein.
General Reference	Engblom,D., Kornfeld,J.W., Schwake,L., Tronche,F., Reimann,A., Beug,H., Hennighausen,L., Moriggl,R. and Schutz,G. (2007) Direct glucocorticoid receptor-Stat5 interaction in hepatocytes controls body size and maturation-related gene expression. <i>Genes Dev.</i> 21 (10), 1157-1162. Baugh,J.E. Jr., Floyd,Z.E. and Stephens,J.M. (2007) The modulation of STAT5A/GR complexes during fat cell differentiation and in mature adipocytes. <i>Obesity (Silver Spring)</i> 15 (3), 583-590. Laurence,A., Tato,C.M., Davidson,T.S., Kanno,Y., Chen,Z., Yao,Z., Blank,R.B., Meylan,F., Siegel,R., Hennighausen,L., Shevach,E.M. and O'Shea,J.J. (2007) Interleukin-2 signaling via STAT5 constrains T helper 17 cell generation. <i>Immunity</i> 26 (3), 371-381.

Related Products

100-401-401	Anti-AKT (RABBIT) Antibody - 100-401-401
100-401-861	Anti-STAT4 (RABBIT) Antibody - 100-401-861
200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268
200-301-269	Anti-AKT pT308 (MOUSE) Monoclonal Antibody - 200-301-269

Related Links

NCBI - 6755672

<http://www.ncbi.nlm.nih.gov/protein/6755672>

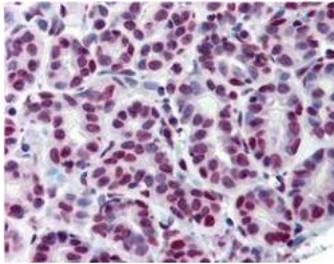
UniProtKB - P42230

<http://www.uniprot.org/uniprot/P42230>

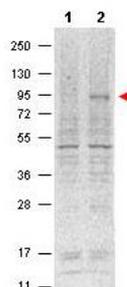
GeneID - 20850

Images

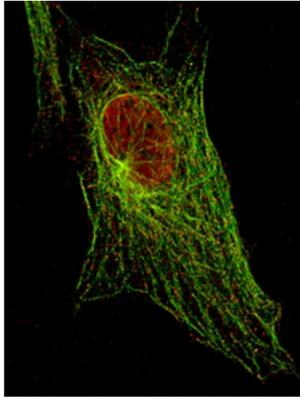
- 1 Immunohistochemistry of Monoclonal Anti-Stat5 pY694 Antibody. Tissue: human breast tissue (40X). Fixation: formalin fixed paraffin embedded (FFPE). Antigen retrieval: steam sections in 0.1 M sodium citrate buffer, pH 6, for 20 min. Rinse with 1XTBST. Primary antibody: Anti-Stat5pY694 at 20 µg/mL. Localization: breast epithelium with moderate nuclear staining. Staining: Stat5 pY694 as precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal communication, Andrew Elston, Lifespan Biosciences, Seattle, WA.



- 2 Western blot using Rockland's Protein A purified Mouse Monoclonal anti-Stat5 pY694 antibody shows detection of phosphorylated Stat5 (indicated by arrowhead at ~91 kDa) in NK92 cells after 30 min treatment with 1Ku of IL-2 (lane 2). No reactivity is seen for non-phosphorylated Stat5 in untreated cells (lane 1). The membrane was probed with the primary antibody at a 1:1,000 dilution, overnight at 4° C. For detection DyLight™800 conjugated Gt-a-Mouse IgG was used at a 1:20,000 dilution for 30 min at room temperature followed by visualization using a VersaDoc™ MP 4000 imaging system (Bio-Rad).



- 3 Anti-Stat5 pY694 (MOUSE) Monoclonal Antibody detecting Stat5 in 3T3 cells (immunofluorescent STED microscopy). Red represents Stat5 pY694 protein. Green represents tubulin.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.