Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - 200-301-A45

Code: 200-301-A45 **Size:** 100 µg

Product Description: Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - 200-301-A45

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 STAT5 phospho Y694 Antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Phospho STAT5 antibody is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	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, Stat5a ?and Stat5ß. 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 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
Immunohistochemistry	20-40 µg/ml
WESTERN BLOT	1:500 - 1:2,000
IHC	20-40 µg/ml
IFMICROSCOPY	1:50-1:1000
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year 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. Genes Dev. 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. Obesity (Silver Spring) 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. Immunity 26 (3), 371-381.

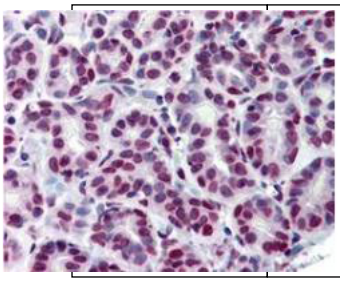
Related Products

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

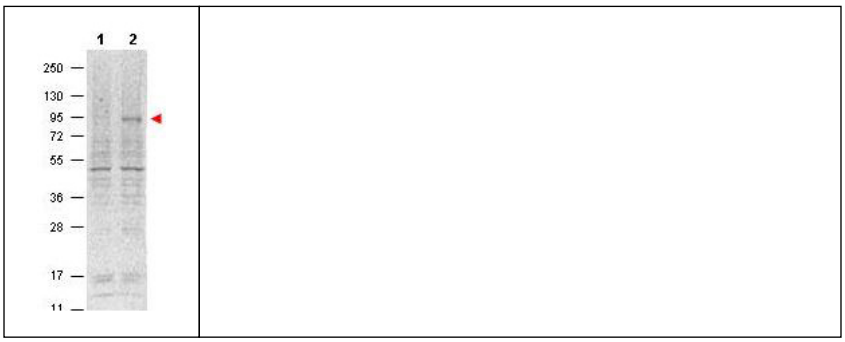
Related Links

Images

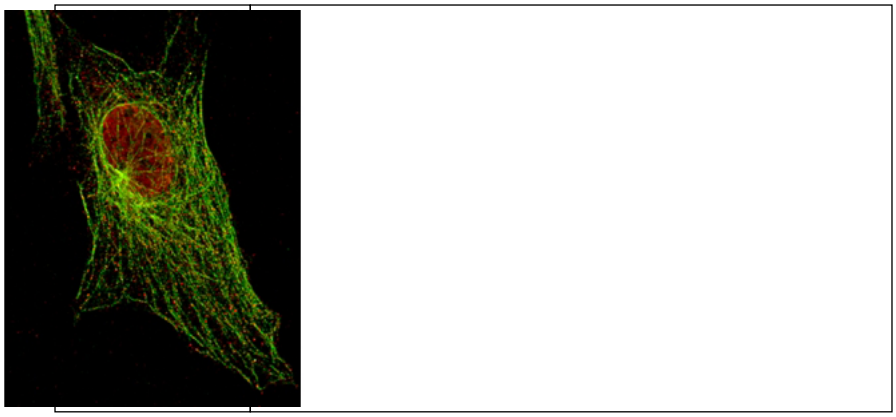
1 Immunohistochemistry using Rockland's Anti-Stat5 pY694 monoclonal antibody shows detection of phosphorylated Stat5pY694 in human breast tissue (40X). The antibody was used a dilution to 20 µg/mL. The image shows breast epithelium with moderate nuclear staining. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the 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 (1:500) detecting Stat5 in 3T3 cells (immunofluorescent STED microscopy). Red represents Stat5 pY694 protein. Green represents tubulin.



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