

Datasheet for 200-301-A45**Stat5 phospho Y694 Antibody****Overview**

Description:	Anti-STAT5 pY694 (MOUSE) Monoclonal Antibody - 200-301-A45
Item No.:	200-301-A45
Size:	100 µg
Applications:	ELISA, IF, IHC, Multiplex, WB
Reactivity:	Human, Mouse
Host Species:	Mouse

Product Details

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, Stat5α and Stat5β. 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.
Synonyms:	mouse anti-STAT5 pY694 Antibody, MGF antibody, Signal Transducer and Activator of Transcription 5A antibody, STAT 5 antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	5F6.F1
Format:	IgG1

Target Details

Gene Name:	Stat5a
Reactivity:	Human, Mouse
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-STAT5 phospho Y694 monoclonal antibody was produced by repeated immunizations with a synthetic phospho-peptide corresponding to residues surrounding Y694 of mouse STAT5a protein.
Purity/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.
Relevant Links:	• UniProtKB - P42230 • NCBI - 6755672 • GenelD - 20850

Application Details

Tested Applications:	ELISA, IF, IHC, Multiplex, WB
Application Note:	Phospho STAT5 pY694 monoclonal antibody has been tested by ELISA, western blot, immunohistochemistry, and immunofluorescence. 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000
IF:	1:50-1:1000
IHC:	20-40 µg/ml
WB:	1:500 - 1:2,000

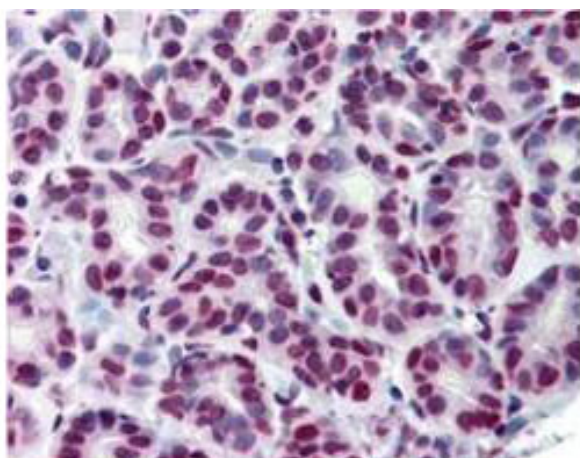
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

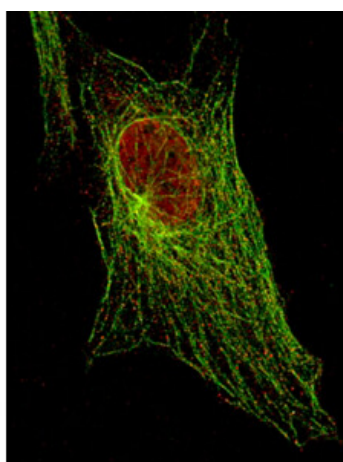
Shipping Condition:	Dry Ice
Storage Condition:	Store STAT5 phospho Y694 Antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Phospho STAT5 antibody is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



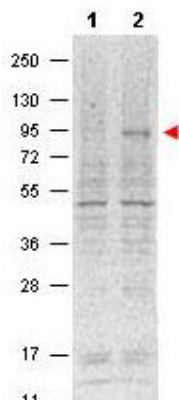
Immunohistochemistry

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.



Immunofluorescence Microscopy

Immunofluorescent STED Microscopy of Anti-Stat5 pY694 (MOUSE) Monoclonal Antibody in 3T3 cells. Anti-Stat5 pY694 at 1:500 detecting Stat5 in 3T3 cells. Staining: Stat5 pY694 protein [Red]. Tubulin [Green].



Western Blot

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 (p/n 610-145-002) 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).

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.