

Datasheet for 600-401-A45**Stat5 phospho Y694 Antibody****Overview**

Description:	Anti-STAT5 pY694 (RABBIT) Antibody - 600-401-A45
Item No.:	600-401-A45
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. 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 Stat5b. 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.
Synonyms:	rabbit anti-STAT5 pY694, phosphorylated STAT5 antibody, STAT-5, STAT 5, STAT5A, Signal Transducer and Activator of Transcription 5A antibody, STAT-5A, Transcription factor STAT5A antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

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

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic phospho-peptide corresponding to residues surrounding Y694 of mouse STAT5a protein.
Purity/Specificity:	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography using phospho-peptide coupled to agarose beads followed by solid phase adsorption against nonphospho-peptide. 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, IHC, WB
Application Note:	This affinity purified antibody has been tested for use in 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 polyclonal 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:	1:25,000
IHC:	20-40 µg/ml
WB:	1:500 - 1:2,000

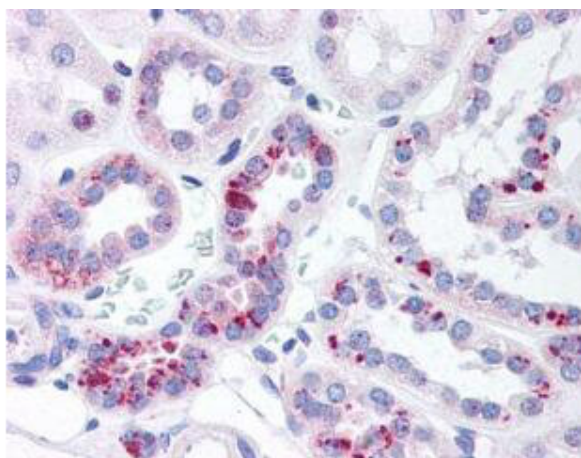
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.1 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

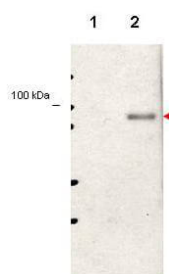
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several 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

Rockland's affinity purified anti-Stat5 pY694 antibody was used at 20µg/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate positive staining of distal convoluted tubules and collecting ducts of human kidney at 40X. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.



Western Blot

Western blot using Rockland's affinity purified 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. Personal Communication from Ana Gamero, CCR-NCI, Bethesda, MD.

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.