

Datasheet for 600-401-A42**Stat1 Antibody****Overview**

Description:	Anti-STAT1 (RABBIT) Antibody - 600-401-A42
Item No.:	600-401-A42
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Mouse, Rat
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 1 (Stat1) belongs to a family of cytoplasmic transcription factors that can be activated (phosphorylated) by a cell surface receptor. Phosphorylation of Stat1 at Tyr701 induces Stat1 dimerization, nuclear translocation and DNA binding. Stat1 has two isoforms, Stat1a (91 kDa) and the splice variant Stat1b (84 kDa). Stat1 has been found to be inappropriately activated in many tumors. In addition to tyrosine phosphorylation, Stat1 is phosphorylated through a p38 mitogen-activated protein kinase (MAPK)-dependent pathway at Ser727 in response to IFN-γ and other cellular stresses. Stat1 is localized in the cytoplasm and upon phosphorylation at Y701 is translocated to the nucleus.
Synonyms:	rabbit anti-STAT1 antibody, STAT-1, STAT 1, Signal transducer and activator of transcription 1-α/β, Transcription factor ISGF-3 components p91/p84
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Stat1
Reactivity:	Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to residues near the carboxy terminus of mouse Stat1 protein.
Purity/Specificity:	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for mouse Stat1 protein. A BLAST analysis was used to suggest cross-reactivity with Stat1 from mouse and rat based on 100% homology with the immunizing sequence. Partial reactivity is expected against Stat1 from human sources as 90% homology is noted. Cross-reactivity with Stat1 from other sources has not been determined.
Relevant Links:	• NCBI - 114326482 • UniProtKB - Q99K94 • GeneID - 20846

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 91 kDa in size corresponding to Stat1 protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:25,000
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
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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.

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.