

Datasheet for 600-401-H38S**STAT2 phospho S734 Antibody****Overview**

Description:	Anti-STAT2 pS734 (RABBIT) Antibody - 600-401-H38S
Item No.:	600-401-H38S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Human, Monkey
Host Species:	Rabbit

Product Details**Background:**

STAT2 is a member of the STAT family of transcription factors. Unlike other STATs, STAT2 is unique as it can only be activated by interferons (IFNs). STAT2 is a critical component in mediating many IFN-stimulated biological activities including antiproliferation and antiviral responses. Upon IFN treatment, STAT1 and STAT2 become tyrosine phosphorylated, assemble as heterodimers that bind IRF9 to form the ISGF3 complex. This complex translocates to the nucleus, binds to promoters of IFN-stimulated genes and mediates gene transcription. Consequently, mutations in STAT2 or loss of STAT2 expression leads to impairment in IFN signal transduction and gene activation. IFN-alpha is an approved drug for the treatment of several forms of cancer. Yet only a subset of patients who receive IFN-alpha therapy benefit from the treatment. Given that STAT2 is activated by IFNs, it is important to define if the reduced or lack of antitumor effects seen in cancer patients on IFN therapy is due to defects in STAT2 function. STAT2pS734 antibody is ideal for researchers focused in cancer and transcription factor research.

Synonyms:	rabbit anti-STAT2 pS734 antibody, phosphorylated STAT2 antibody, STAT-2, STAT 2, Signal transducer and activator of transcription 2, p113
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	STAT2
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Reactivity:	Human, Monkey
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide
Immunogen:	STAT2 pS734 antibody was prepared from whole rabbit serum produced by repeated immunizations with a phosphorylated synthetic peptide corresponding to serine 734 a region near the C-terminus of human STAT2 protein.
Purity/Specificity:	STAT2 pS734 affinity purified antibody is directed against human STAT2 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for phosphorylated S734 human STAT2. A BLAST analysis was used to suggest cross-reactivity with STAT2 pS734 protein from human and monkey sources based on homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - P52630 • NCBI - NP_005410.1 • GeneID - 6773

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-STAT2 pS734 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 97.9 kDa in size corresponding to STAT2pS734 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:	1:5,000
WB:	1:1,000

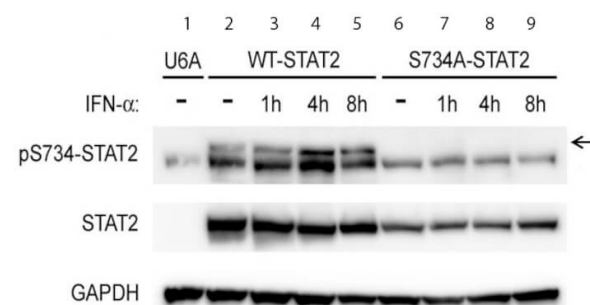
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.44 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 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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-STAT2pS734 antibody. Lane 1: U6A cells (STAT2 deficient) untreated. Lane 2: U6A cells reconstituted with STAT2 untreated. Lane 3: U6A cells, STAT2 treated with IFNα (1h). Lane 4: U6A cells, STAT2 + IFNα (4h). Lane 5: U6A cells, STAT2 + IFNα (8h). Lane 6: U6A cells reconstituted with S734A-STAT2 mutant untreated. Lane 7: U6A cells, S734A-STAT2 treated with IFNα (1h). Lane 8: U6A cells, S734A-STAT2 + IFNα (4h). Lane 9: U6A cells, S734A-STAT2 + IFNα (8h). Load: 20 µg per lane. Primary antibody: STAT2 pS734 antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 97.9 kDa, ~110 kDa for STAT2pS734. Other band(s): Non specific 100kDa, STAT2, GAPDH loading control.

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.