

Datasheet for 100-401-861**Stat4 Antibody****Overview**

Description:	Anti-STAT4 (RABBIT) Antibody - 100-401-861
Item No.:	100-401-861
Size:	100 µL
Applications:	ELISA, IP, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Signal transducer and activator of transcription 4 (STAT4) carries out a dual function of signal transduction and activation of transcription. STAT4 forms a homodimer or a heterodimer with related transcription factor STAT family members. STAT4 has a cytoplasmic localization and is translocated into the nucleus in response to activation by JAK, which phosphorylates STAT4 at a tyrosine residue. Various ligands, including interferons and growth factors, induce activation of the JAK kinases, which induce STAT activation. IL-12 has also been identified as an activator of STAT4. Serine phosphorylation is also required for maximal transcriptional activity. The highest level of STAT4 expression is observed in testis and in myeloid cells.
Synonyms:	rabbit anti-STAT4 Antibody, Signal transducer and activator of transcription 4, Stat4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	Stat4
Reactivity:	Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-Terminal region near amino acids 725-749 of Mouse STAT-4.

Purity/Specificity: This antibody was prepared from whole rabbit antiserum by delipidation and defibrination. Reactivity occurs against mouse STAT4 protein. Cross reactivity with closely related STAT family members has not been determined. Cross reactivity is expected against human STAT4 protein based on a 95% homology of the amino acid sequence of the immunogen between human and mouse. A single amino acid change is reported (from N to K). Cross reactivity is expected against rat STAT4.

Relevant Links:

- [UniProtKB - P42228](#)
- [NCBI - AAA19453.1](#)
- [GeneID - 20849](#)

Application Details

Tested Applications: ELISA, IP, WB

Application Note: This antibody has been tested for use in ELISA, western blotting and immunoprecipitation. This product was assayed by western blotting after immunoprecipitation of mouse STAT4 from a lysate containing over expressed protein. A 1:5,000 dilution shows reactivity with a band at 85 kDa corresponding to mouse STAT4. Use 5 μ L for immunoprecipitation. A HeLa whole cell lysate or mouse testis lysate are suitable for use as a positive control. Reactivity in other immunoassays is unknown.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:5,000 - 1:25,000

IP: Use 5 μ L

WB: 1:5,000

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 85 mg/mL by Refractometry

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



Western Blot

Western blot following immunoprecipitation of STAT4 using ROCKLAND Immunochemical's Rabbit-anti-STAT4 antibody. Lane 2 shows the detection of a single band corresponding to mouse STAT4. Molecular weight markers (not shown) confirm a MW of ~ 85 kDa. For IP use approximately 5 µl of antiserum. A 1:5,000 dilution of the antiserum was used for western blotting. Detection occurs using a 1:2,000 dilution of HRP Goat-a-Rabbit IgG (611-103-122) with visualization via ECL. Film exposure approximately 45". Other detection systems will yield similar results.

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.