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Datasheet for 200-401-EV3

STAT1 alpha Antibody

Overview

Description:	Anti-STAT1 alpha (RABBIT) Antibody - 200-401-EV3
Item No.:	200-401-EV3
Size:	100 µg
Applications:	ELISA, IF, IHC, IP, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	STATs (signal transducers and activators of transcription) are a family of cytoplasmic latent transcription factors that are activated to regulate gene expression in response to a large number of extracellular signaling polypeptides including cytokines, interferons, and growth factors. After phosphorylation by JAK tyrosine kinases, STATs enter the nucleus to regulate transcription of many different genes. Among the seven STATs (Stat1, Stat2, Stat3, Stat4, Stat5a, Stat5b, and Stat6), Stat1, Stat3, Stat5a, and Stat5b have a wide activation profile. STAT1 is activated by many different ligands including IFN family (IFN-a, IFN-b, IFN-gamma and IL-10), gp130 family (IL-6, IL-11, LIF, CNTF, and G-CSF), and receptor tyrosine kinases (EGF, PDGF, and CSF-1). STAT1 has two forms, the 91 kDa STAT1a and the 84 kDa STAT1b which are encoded by the same gene with splicing variant.
Synonyms:	STAT1 alpha Antibody, CANDF7, ISGF-3, STAT91
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	STAT1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-STAT1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to amino acids near the C-terminus of human STAT1 alpha. The sequences differ from the murine corresponding sequences by four amino acids.
Purity/Specificity:	Anti-STAT1 alpha Antibody is affinity chromatography purified via peptide column. No reaction to the 84 kDa STAT1a.
Relevant Links:	• UniProtKB - P42224 • GeneID - 6772 • NCBI - NP_009330.1

Application Details

Tested Applications:	ELISA, IF, IHC, IP, WB
Application Note:	Anti-STAT1 alpha Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry, Immunofluorescence, and Immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 87 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-1 µg/mL

Formulation

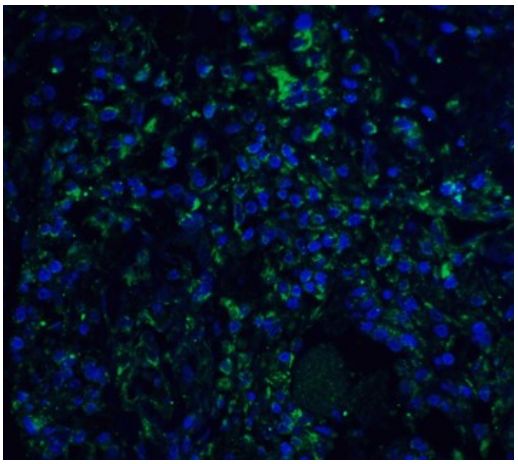
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

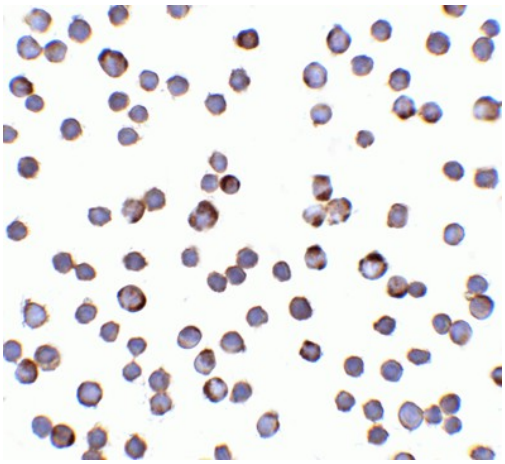
Shipping Condition:	Dry Ice

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.

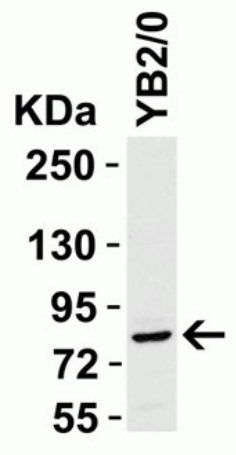
Images



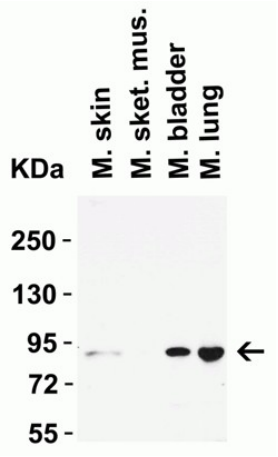
Immunofluorescence Microscopy
Immunofluorescence Validation of STAT1 alpha. Immunofluorescent analysis of 4% paraformaldehyde-fixed Human Colon Tissue labeling STAT1 alpha at 20 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green) and DAPI staining (blue).



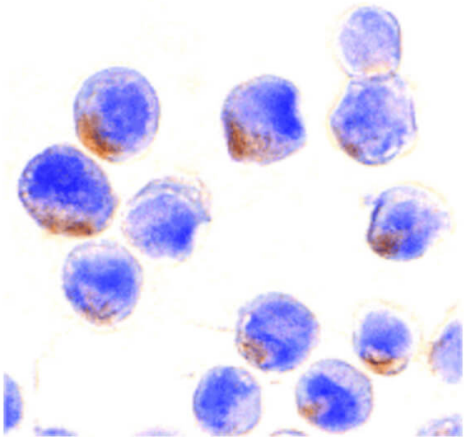
Immunohistochemistry
Immunocytochemistry of RAIDD in Hela cells with RAIDD antibody at 10 µg/mL.



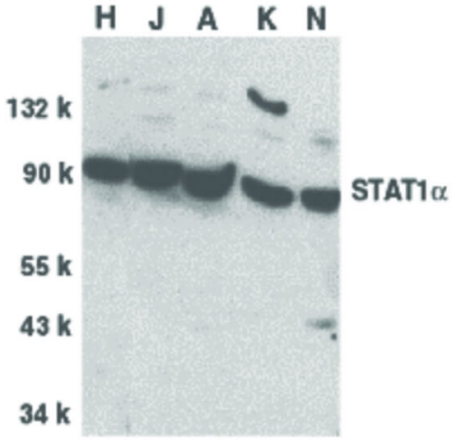
Western Blot
Western Blot Validation.
Loading: 15 µg of YB2/0 lysates per lane. Antibodies: STAT1 alpha (1 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot Validation.
Loading: 15 µg of Mouse tissues lysates per lane. Antibodies: STAT1 alpha (0.5 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry
Immunocytochemistry of anti-STAT1 alpha. Tissue: HeLa cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: anti-STAT1 alpha antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: STAT1 alpha is membrane bound and extracellular. Staining: STAT1 alpha as precipitated brown signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of Rabbit anti-STAT1 alpha antibody. Lane H: HeLa Lysate. Lane J: Jurkat Lysate. Lane A: A431 Lysate. Lane K: K562 Lysate. Lane N: NIH3T3 Lysate. Load: 35 µg per lane. Primary antibody: STAT1 α antibody at 1:1000 for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 87 kDa, 90kDa for STAT1a.

Disclaimer

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