



STAT1 α Rabbit mAb

Catalog No	YP-rAb-18092
Isotype	IgG
Reactivity	Human,Mouse,Rat,Chicken
Applications	WB,IHC,IF,IP,ELISA
Gene Name	STAT1
Protein Name	Signal transducer and activator of transcription 1-alpha/beta (Transcription factor ISGF-3 components p91/p84)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:500-1000; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; IP 1:50-200 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	$\geq 90\%$
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	STAT1 α ;Signal transducer and activator of transcription 1-alpha/beta (Transcription factor ISGF-3 components p91/p84);STAT1 ; Signal transducer and activator of transcription 1-alpha/beta ; Transcription factor ISGF-3 components p91/p84;STAT1
Observed Band	90kD
Calculated Molecular Weight	87kD
Cell Pathway	Nuclear
Tissue Specificity	
Function	Signal transducer and transcription activator that mediates cellular responses to interferons (IFNs), cytokine KITLG/SCF and other cytokines and other growth factors. Following type I IFN (IFN-alpha and IFN-beta) binding to cell surface receptors, signaling via protein kinases leads to activation of Jak kinases (TYK2 and JAK1) and to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize and associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus . ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of IFN-stimulated genes (ISG), which drive the cell in an antiviral state. In response to type II IFN (IFN-gamma), STAT1 is tyrosine- and serine-phosphorylated . It then forms a homodimer termed IFN-gamma-activated factor (GAF), migrates into the nucleus and binds to the IFN gamma activated sequence (GAS) to drive the



expression of the target genes, inducing a cellular antiviral state. Becomes activated in response to KITLG/SCF and KIT signaling. May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4.

Background

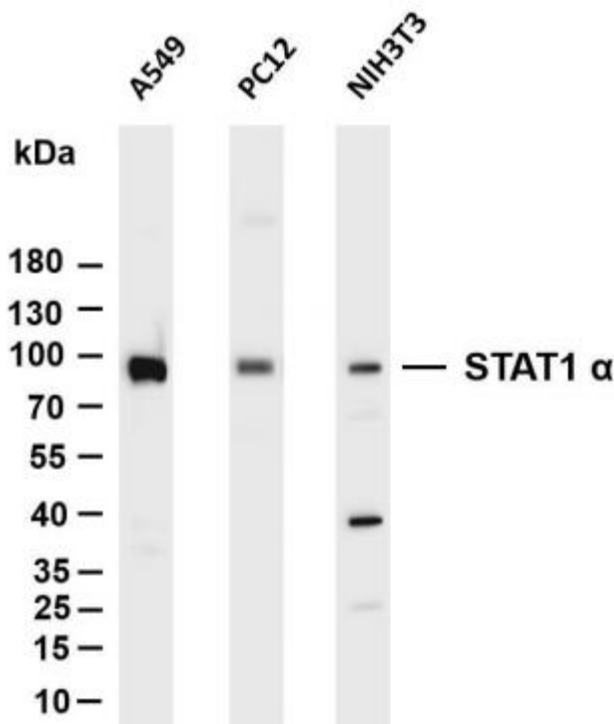
signal transducer and activator of transcription 1(STAT1) Homo sapiens The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. Two alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008],

matters needing attention

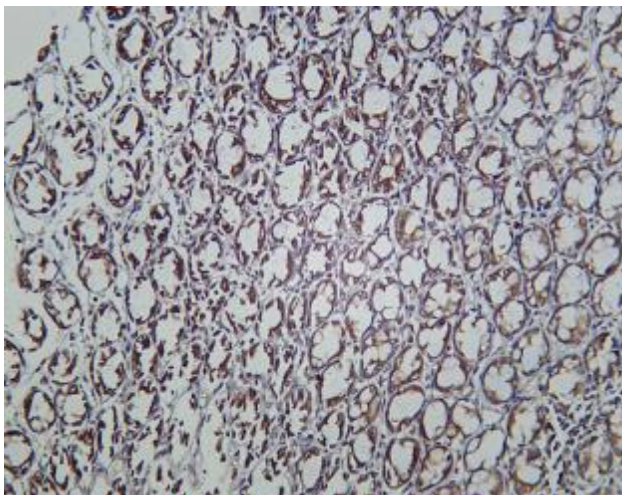
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

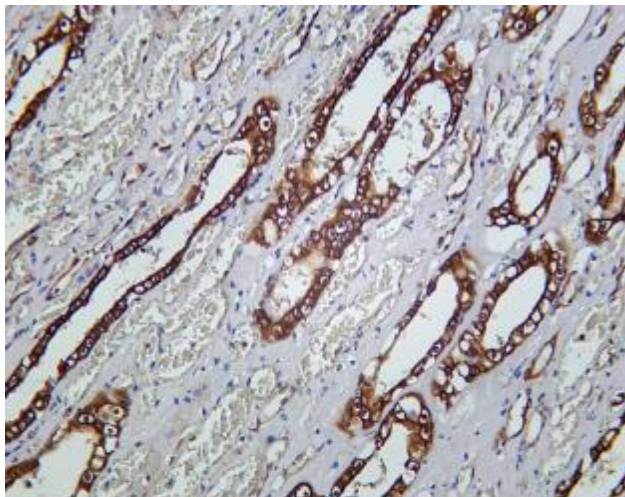


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-STAT1 α antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: PC12 Lane 3: NIH3T3 Predicted band size: 87kDa Observed band size: 90kDa

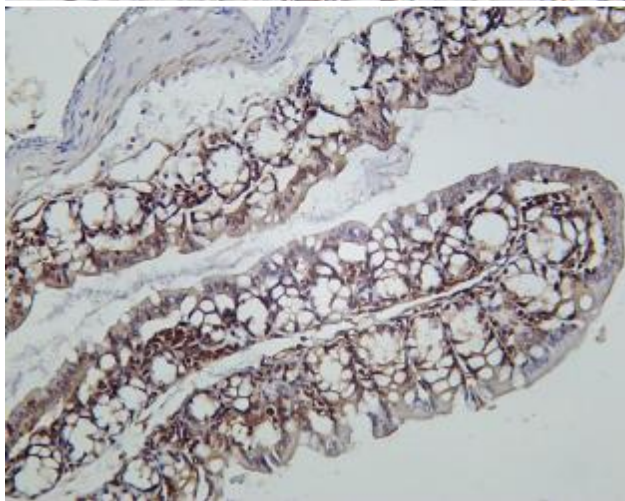


Rat colon was stained with Anti-STAT1 α rabbit antibody

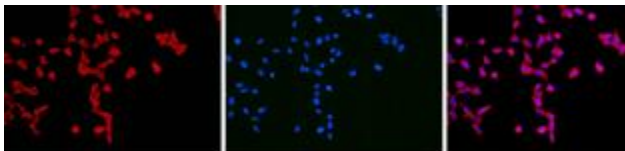




Human kidney was stained with Anti-STAT1 α rabbit antibody



Mouse colon was stained with Anti-STAT1 α rabbit antibody



A

B

C

Immunofluorescence analysis of HEK293. Picture A: STAT1 α antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

