Best Tools for immunology Research

STAT1 α (PT0079R) PT® Rabbit mAb

Catalog No :	YM8042
Reactivity :	Human; Mouse; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Target :	STAT1
Gene Name :	STAT1
Protein Name :	Signal transducer and activator of transcription 1-alpha/beta (Transcription factor ISGF-3 components p91/p84)
Human Gene Id :	6772
Human Swiss Prot No :	P42224
Mouse Swiss Prot No :	P42225
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:500-1000,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200
Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	87kD
Observed Band :	90kD
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],

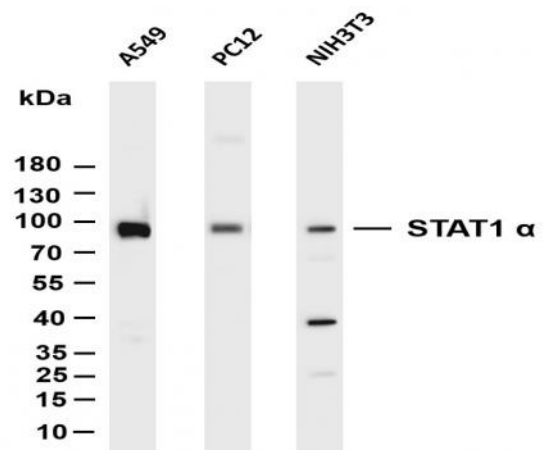
Function :

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 act

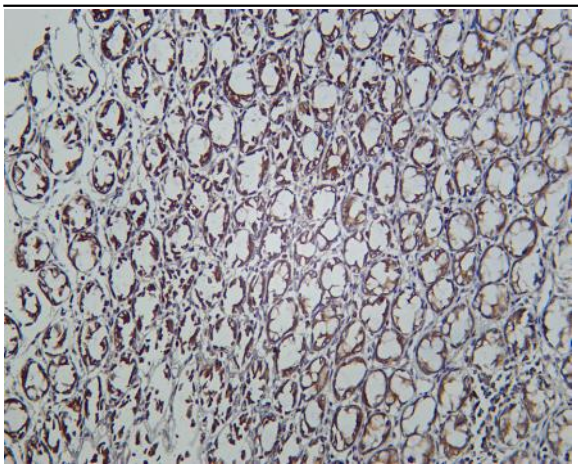
Subcellular Location :

Nuclear

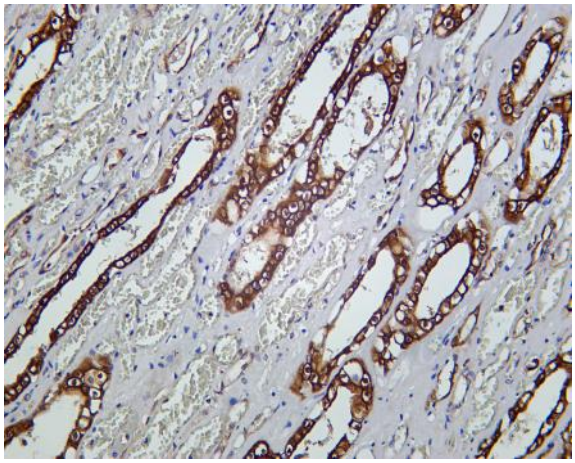
Products Images



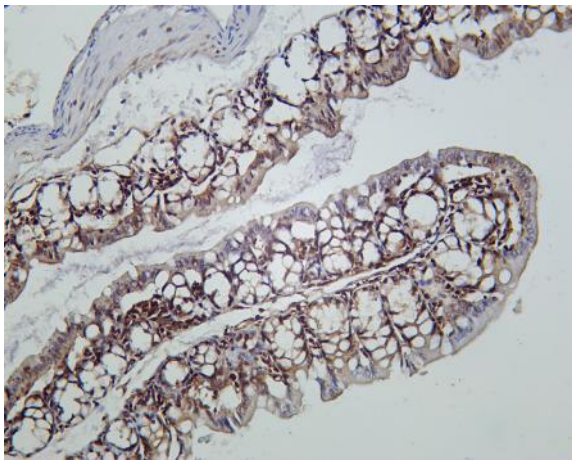
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-STAT1 α (PT0079R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: PC12 Lane 3: NIH3T3 Predicted band size: 87kDa Observed band size: 90kDa



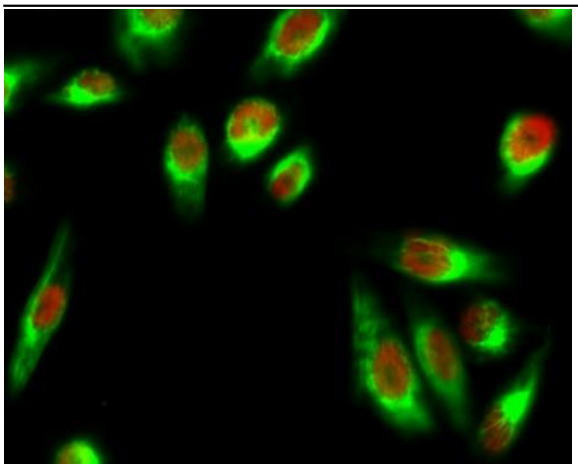
Rat colon was stained with Anti-STAT1 α (PT0079R) rabbit antibody



Human kidney was stained with Anti-STAT1 α (PT0079R) rabbit antibody



Mouse colon was stained with Anti-STAT1 α (PT0079R) rabbit antibody



Immunofluorescence analysis of Hela cell. 1,Stat1 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). p53 Monoclonal Antibody(6C4)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).