

Rabbit Anti-STAT1 Polyclonal Antibody

CPB-1072RH Rabbit(STAT1)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Rabbit Anti-STAT1 Polyclonal Antibody
Antigen Description	Signal transducer and activator of transcription that mediates signaling by interferons (IFNs). Following type I IFN (IFN-alpha and IFN-beta) binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize, 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 interferon stimulated genes, 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.
specificity	The antibody detects endogenous level of total STAT1 protein.
Target	STAT1
Immunogen	Peptide sequence around aa. 725~729 (P-M-S-P-E) derived from Human STAT1.
Host	Rabbit
Species	Human
Cross Reactivity	Human; Mouse; Rat
conjugation	N/A
Applications	WB,IHC

PACKAGING

Format	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C /1 year

ANTIGEN GENE INFORMATION

Gene Name	STAT1 signal transducer and activator of transcription 1, 91kDa [Homo sapiens]
Official Symbol	STAT1
Synonyms	STAT1; signal transducer and activator of transcription 1, 91kDa; signal transducer and activator of transcription 1, 91kD; signal transducer and activator of transcription 1-alpha/beta; ISGF 3; STAT91; transcription factor ISGF 3 components p91/p84; transcription factor ISGF-3 components p91/p84; signal transducer and activator of transcription-1; CANDF7; ISGF-3; DKFZp686B04100;
GeneID	6772
mRNA Refseq	NM_007315
Protein Refseq	NP_009330
MIM	600555

UniProt ID	P42224
Chromosome Location	2q32.2-q32.3
Pathway	Adipogenesis, organism-specific biosystem; Antiviral mechanism by IFN-stimulated genes, organism-specific biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; CXCR4-mediated signaling events, organism-specific biosystem; Chemokine signaling pathway, organism-specific biosystem; Chemokine signaling pathway, conserved biosystem; Cytokine Signaling in Immune system, organism-specific biosystem;
Function	RNA polymerase II core promoter sequence-specific DNA binding; RNA polymerase II core promoter sequence-specific DNA binding transcription factor activity; calcium ion binding; double-stranded DNA binding; enzyme binding; non-membrane spanning protein tyrosine kinase activity; protein binding; protein homodimerization activity; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; NOT sequence-specific DNA binding transcription factor activity; signal transducer activity; tumor necrosis factor receptor binding;