

## **Stat1 Polyclonal Antibody**

Catalog No: YT4439

**Reactivity:** Human; Mouse; Rat; Chicken

**Applications:** IF;WB;IHC;IP;ELISA

Target: Stat1

**Fields:** >>Chemokine signaling pathway;>>Necroptosis;>>Osteoclast

differentiation;>>Toll-like receptor signaling pathway;>>NOD-like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>JAK-STAT

signaling pathway;>>Th1 and Th2 cell differentiation;>>Th17 cell

differentiation;>>Prolactin signaling pathway;>>Thyroid hormone signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Growth

hormone synthesis, secretion and

action;>>Leishmaniasis;>>Toxoplasmosis;>>Tuberculosis;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Influenza A;>>Human papillomavirus

infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Herpes simplex

virus 1 infection;>>Epstein-Barr virus infection;>>Coronavirus disease -

COVID-19;>>Pathways in cancer;>>Pancreatic cancer;>>PD-L1 expression and

PD-1 checkpoint pathway in cancer;>>Inflammatory bowel disease

Gene Name: STAT1

**Protein Name:** Signal transducer and activator of transcription 1-alpha/beta

**Human Gene Id:** 6772

**Human Swiss Prot** 

P42224

No:

Mouse Swiss Prot

P42225

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

STAT1. AA range:694-743

**Specificity:** Stat1 Polyclonal Antibody detects endogenous levels of Stat1 protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



Source: Polyclonal, Rabbit, IgG

**Dilution:** IF 1:50-200 WB 1:500 - 1:2000. IHC 1:100 - 1:300. IP: 1:200. ELISA: 1:10000.

Not yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 87kD

**Cell Pathway :** Chemokine; Toll\_Like; Jak\_STAT; Pathways in cancer; Pancreatic cancer;

**Background:** 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 interferonalpha, 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:** disease:Defects in STAT1 are a cause of mendelian susceptibility to

mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with

susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity whose severity

determines the clinical outcome. Some patients die of overwhelming

mycobacterial disease with lepromatous-like lesions in early childhood, whereas

Subcellular Location:

Cytoplasm . Nucleus . Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to IFN-gamma and signaling by

activated FGFR1, FGFR2, FGFR3 or FGFR4 (PubMed:15322115).

Monomethylation at Lys-525 is required for phosphorylation at Tyr-701 and translocation into the nucleus (PubMed:28753426). Translocates into the nucleus

in response to interferon-beta stimulation (PubMed:26479788). .



**Expression**: B-cell,Brain,Retina,Testis,

## **Products Images**

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