

STAT3 (Phospho Tyr705) (PT0742R) PT™ Rabbit mAb

CatalogNo: YM8551 **Recombinant** 

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat, Pig

Applications

- WB, IHC, IF, IP, ELISA, CHIP,

MW

- 88kD (Calculated)
88kD (Observed)

Isotype

- IgG, Kappa

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

Recommended Dilution Ratios

IHC 1:200-1:1000**WB 1:2000-1:10000****IF 1:200-1:1000****ELISA 1:5000-1:20000****IP 1:50-1:200****CHIP 1:50-1:100**

Basic Information

Clonality Monoclonal**Clone Number** PT0742R

Immunogen Information

Immunogen The specific immunogen used to produce this antibody is proprietary information.**Specificity** Phospho-Stat3 (Y705) protein detects endogenous levels of STAT3

| Target Information

Gene name STAT3 APRF

Protein Name Signal transducer and activator of transcription 3 (Acute-phase response factor)

Organism	Gene ID	UniProt ID
Human	6774;	P40763;
Mouse	20848;	P42227;
Rat	25125;	P52631;

Cellular Localization

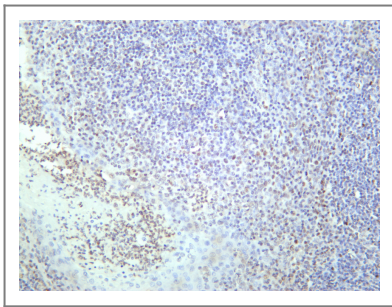
Cytoplasm . Nucleus . Shuttles between the nucleus and the cytoplasm. Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to signaling by activated FGFR1, FGFR2, FGFR3 or FGFR4. Constitutive nuclear presence is independent of tyrosine phosphorylation. Predominantly present in the cytoplasm without stimuli. Upon leukemia inhibitory factor (LIF) stimulation, accumulates in the nucleus. The complex composed of BART and ARL2 plays an important role in the nuclear translocation and retention of STAT3. Identified in a complex with LYN and PAG1.

Tissue specificity Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Expressed in naive CD4(+) T cells as well as T-helper Th17, Th1 and Th2 cells (PubMed:31899195).

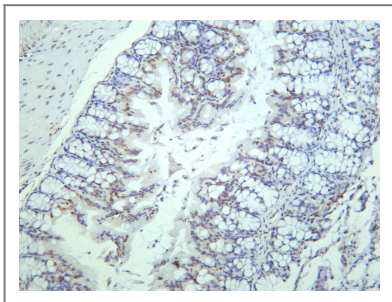
Function

Disease:Defects in STAT3 are the cause of hyperimmunoglobulin E recurrent infection syndrome autosomal dominant (AD-HIES) [MIM:147060]; also known as hyper-IgE syndrome or Job syndrome. AD-HIES is a rare disorder of immunity and connective tissue characterized by immunodeficiency, chronic eczema, recurrent Staphylococcal infections, increased serum IgE, eosinophilia, distinctive coarse facial appearance, abnormal dentition, hyperextensibility of the joints, and bone fractures.,Function:Transcription factor that binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes. Activated by IL31 through IL31RA.,miscellaneous:Involved in the gp130-mediated signaling pathway.,online information:STAT3 entry,online information:STAT3 mutation db,PTM:Tyrosine phosphorylated in response to IL-6, IL-11, CNTF, LIF, CSF-1, EGF, PDGF, IFN-alpha and OSM. Phosphorylated on serine upon DNA damage, probably by ATM or ATR. Serine phosphorylation is important for the formation of stable DNA-binding STAT3 homodimers and maximal transcriptional activity.,similarity:Belongs to the transcription factor STAT family.,similarity:Contains 1 SH2 domain.,subcellular location:Shuttles between the nucleus and the cytoplasm. Constitutive nuclear presence is independent of tyrosine phosphorylation.,subunit:Forms a homodimer or a heterodimer with a related family member (at least STAT1). Interacts with NCOA1, PELP1, SOCS7 and STATIP1. Interacts with HCV core protein. Interacts with IL23R in presence of IL23. Interacts with IL31RA. Interacts with SIPAR. Interacts (via SH2 domain) with NLK (By similarity). Interacts with KPNA4 and KPNA5; KPNA4 may be the primary mediator of nuclear import (By similarity). Interacts with TMF1.,tissue specificity:Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.,

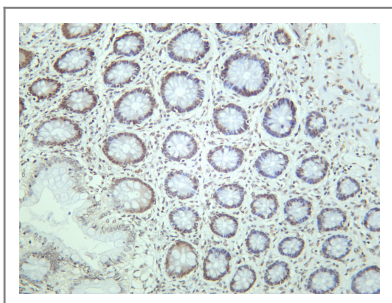
| Validation Data



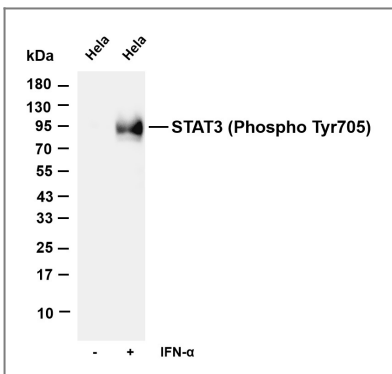
Human tonsil was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



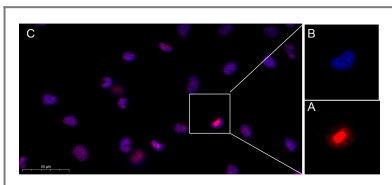
Mouse colon was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



Human colon was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-STAT3 (Phospho Tyr705) (PT0742R) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: HeLa was starved of serum overnight and then treated with $\text{INF-}\alpha$ (100 ng/mL) for 5 minutes Predicted band size: 88kDa Observed band size: 88kDa



Immunofluorescence analysis of HeLa . Picture A: STAT3 (Phospho Tyr705) (PT0742R) Rabbit mAb (red). Picture B: DAPI (blue). Picture C: Merge of A+B

Contact information

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Please scan the QR code to access additional product information:
STAT3 (Phospho Tyr705) (PT0742R) PT™ Rabbit mAb

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