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

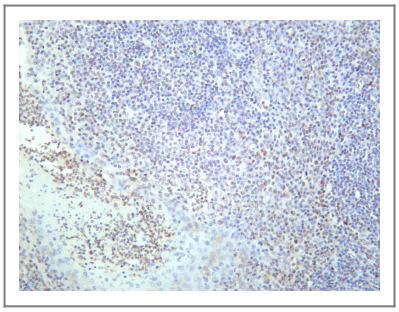
Organism	Gene ID	UniProt ID
Human	6774;	P40763;
Mouse	20848;	P42227;
Rat	25125;	P52631;

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.

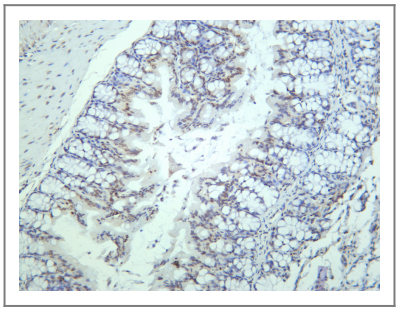
Tissue specificity Heart , brain , placenta , lung , liver , skeletal muscle , kidney and pancreas. Expressed in naive CD4 (+) T cells as well as T-helper Th17 , Th1 and Th2 cells (PubMed:31899195) .

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. ,

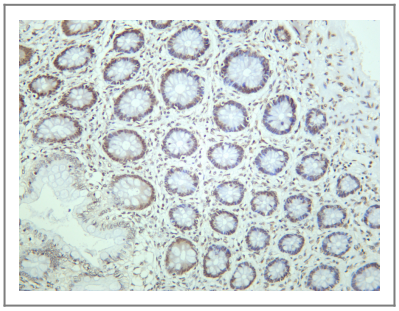
Validation Data



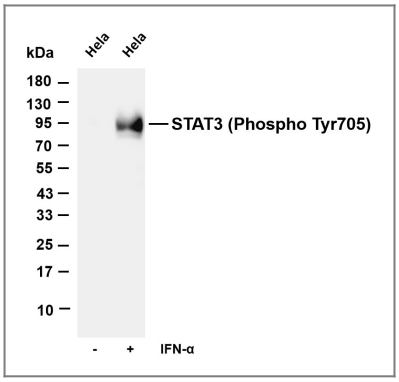
Human tonsil was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



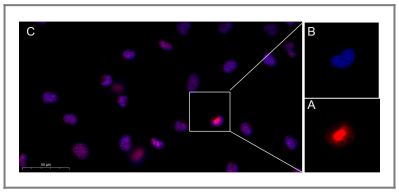
Mouse colon was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



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 INF-α (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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