

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

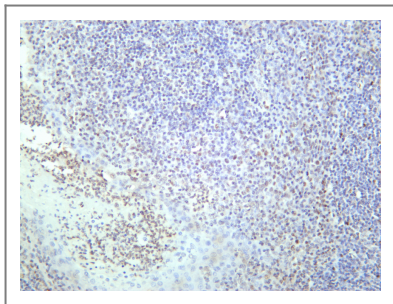
Organism	Gene ID	UniProt ID
Human	6774 ;	P40763 ;
Mouse	20848 ;	P42227 ;
Rat	25125 ;	P52631 ;

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.

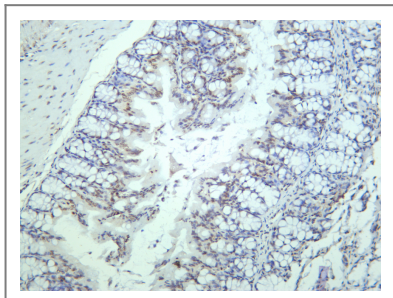
Tissue specificity Heart , brain , placenta , lung , liver , skeletal muscle , kidney and pancreas. Expressed in naive CD4 (+) T cells as well as T-helper Th17 , Th1 and Th2 cells (PubMed:31899195) .

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. ,

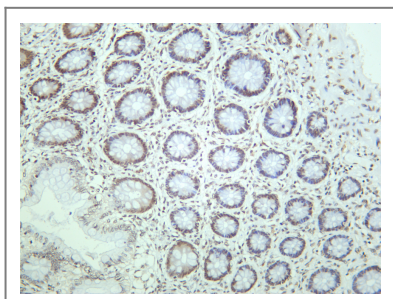
| Validation Data



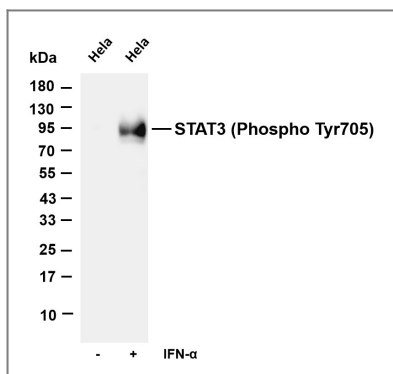
Human tonsil was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



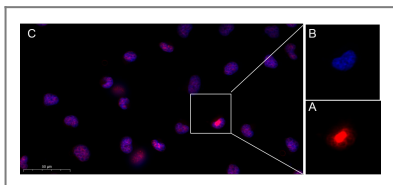
Mouse colon was stained with anti-STAT3 (Phospho Tyr705) rabbit antibody



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 $\text{INF-}\alpha$ (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

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: http://www.immunoway.com
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



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