

## STAT3 (PT0496R) PT<sup>®</sup> Rabbit mAb

CatalogNo: YM8325 **Recombinant** 

### Key Features

**Host Species**

- Rabbit

**Reactivity**

- Human, Mouse, Rat,

**Applications**

- WB, IHC, IF, IP, ELISA

**MW**

- 88kD (Calculated)
- 88kD (Observed)

**Isotype**

- IgG, Kappa

### Recommended Dilution Ratios

**IHC 1:100-1:500****WB 1:1000-1:5000****IF 1:200-1:1000****ELISA 1:5000-1:20000****IP 1:50-1:200**

### 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

### Basic Information

**Clonality** Monoclonal**Clone Number** PT0496R

### Immunogen Information

**Specificity** Endogenous

## | Target Information

**Gene name** STAT3

**Protein Name** Signal transducer and activator of transcription 3

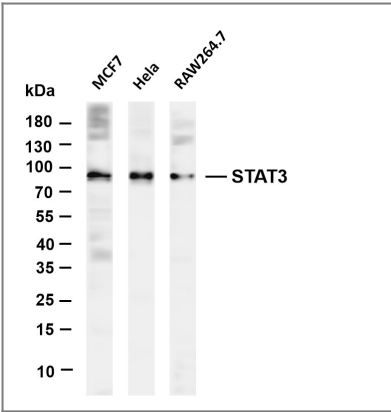
Organism	Gene ID	UniProt ID
Human	<a href="#">6774</a> ;	<a href="#">P40763</a> ;
Mouse	<a href="#">20848</a> ;	<a href="#">P42227</a> ;
Rat	<a href="#">25125</a> ;	<a href="#">P52631</a> ;

**Cellular Localization** Cytoplasm, Nucleus

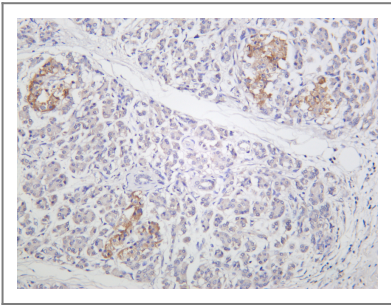
**Tissue specificity** Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Expressed in naive CD4(+) T cells as well as T-helper Th17, Th1 and Th2 cells (PubMed:31899195).

**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.,

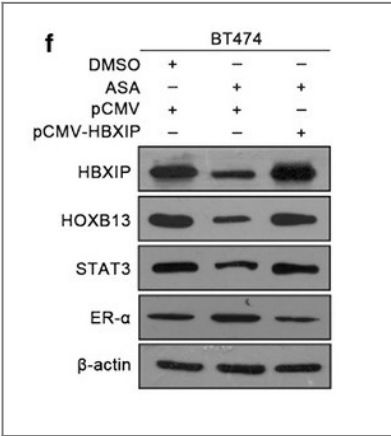
## | Validation Data



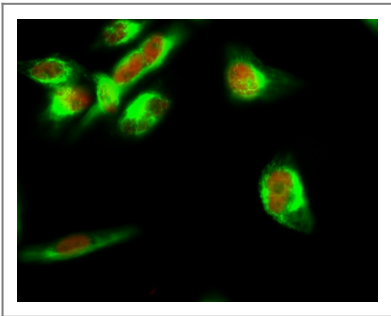
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-STAT3 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: MCF7 Lane 2: HeLa Lane 3: RAW264.7 Predicted band size: 88kDa Observed band size: 88kDa



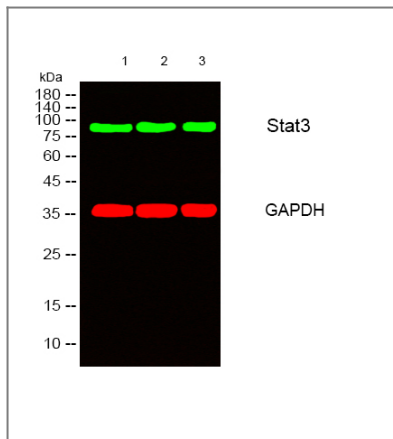
Human pancreas was stained with anti-STAT3 rabbit antibody



Liu, Bowen, et al. "Oncoprotein HBXIP enhances HOXB13 acetylation and co-activates HOXB13 to confer tamoxifen resistance in breast cancer." Journal of hematology & oncology 11.1 (2018): 26.



Immunofluorescence analysis of HeLa cell. 1, Stat3 Antibody(red) was diluted at 1:200(4° overnight). β-tubulin Monoclonal Antibody(M7)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000(room temperature, 50min).



Western blot analysis of lysates from 1) HepG2-UV, 2) K562, 3) AD293 ,4) PC-3 cells, (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night,secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.

## Contact information

Orders: [order@immunoway.com](mailto:order@immunoway.com)  
 Support: [tech@immunoway.com](mailto: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



Please scan the QR code to access additional product information:  
**STAT3 (PT0496R)**  
**PT® Rabbit mAb**

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