

## STAT3 (PTR1364) Mouse mAb

CatalogNo: YM3507

Orthogonal Validated 

### Key Features

#### Host Species

- Mouse

#### Reactivity

- Human, Mouse, Rat,

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 88kD (Calculated)
- 86kD (Observed)

#### Isotype

- IgG

### Recommended Dilution Ratios

**IHC 1:200-1:1000****WB 1:500-2000****IF 1:100-500****ELISA 1:1000-5000**

### 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** PTR1364

### Immunogen Information

**Immunogen** Recombinant Protein**Specificity** This antibody detects endogenous levels of STAT3.

## Target Information

**Gene name** STAT3

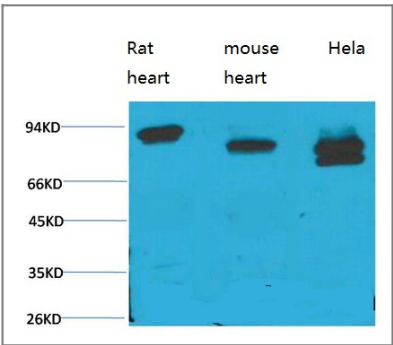
**Protein Name** Signal transducer and activator of transcription 3 (Acute-phase response factor)

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

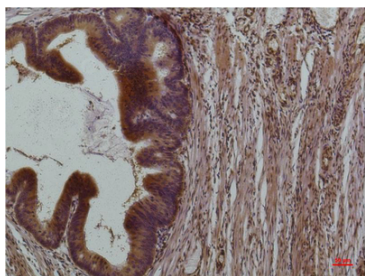
**Tissue specificity** Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Expressed in naive CD4(+) T cells as well as T-helper Th17, Th1 and Th2 cells (PubMed:31899195).

**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.,

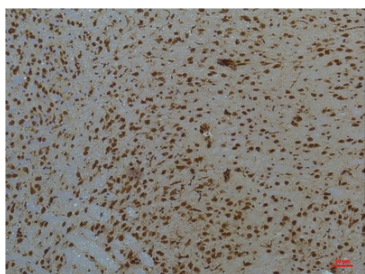
## Validation Data



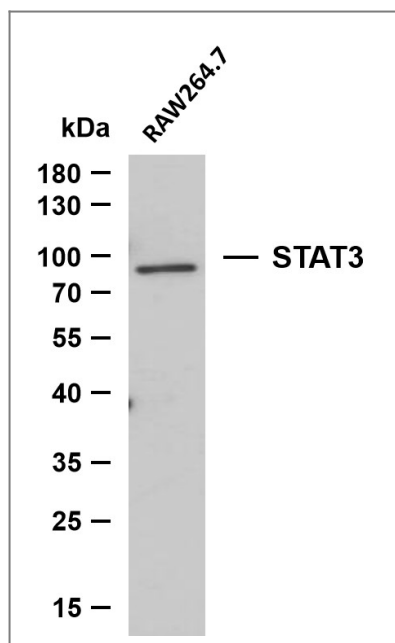
Western blot analysis of 1) Rat Heart Tissue, 2) Mouse Heart Tissue, 3) HeLa with STAT3 Mouse mAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma using STAT3Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using STAT3Mouse mAb diluted at 1:200.



Whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-STAT3 (PTR1364) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: RAW264.7

## Contact information

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Please scan the QR code to access additional product information:  
**STAT3 (PTR1364)**  
**Mouse mAb**