

### **Anti-STAT5b Antibody**

**Catalog # ABO11149** 

### **Specification**

# **Anti-STAT5b Antibody - Product Information**

Application WB, IHC-P
Primary Accession P51692
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Signal transducer and activator of transcription 5B(STAT5B) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

#### **Anti-STAT5b Antibody - Additional Information**

**Gene ID 6777** 

#### **Other Names**

Signal transducer and activator of transcription 5B, STAT5B

# Calculated MW

89866 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, Mouse, Rat, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Human, Rat, Mouse <br/> tr>

### **Subcellular Localization**

Cytoplasm . Nucleus . Translocated into the nucleus in response to phosphorylation. .

#### **Protein Name**

Signal transducer and activator of transcription 5B

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human STAT5b(767-787aa RRVEELLGRPMDSQWIPHAQS), identical to the related rat and mouse sequences.

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities** 

Belongs to the transcription factor STAT family.

# **Anti-STAT5b Antibody - Protein Information**

#### Name STAT5B

#### **Function**

Carries out a dual function: signal transduction and activation of transcription (PubMed:<a href="http://www.uniprot.org/citations/29844444" target="\_blank">29844444</a>). Mediates cellular responses to the cytokine KITLG/SCF and other growth factors. Binds to the GAS element and activates PRL-induced transcription. Positively regulates hematopoietic/erythroid differentiation.

### **Cellular Location**

Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation.

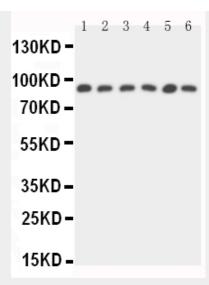
# **Anti-STAT5b Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

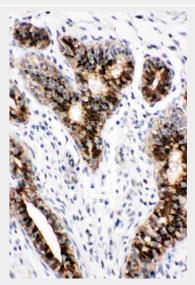
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **Anti-STAT5b Antibody - Images**





Anti-STAT5b antibody, ABO11149, Western blottingLane 1: Rat Intestine Tissue LysateLane 2: Rat Kidney Tissue LysateLane 3: HELA Cell LysateLane 4: A549 Cell LysateLane 5: MM231 Cell LysateLane 6: COLO320 Cell Lysate



Anti-STAT5b antibody, ABO11149, IHC(P)IHC(P): Human Mammary Cancer Tissue

### **Anti-STAT5b Antibody - Background**

STAT5B(Signal transducer and activator of transcription 5B) is a protein that in humans is encoded by the STAT5B gene. STAT5B orthologs have been identified in most placentals for which complete genome data are available. By FISH, Lin et al.(1996) mapped STAT5B to 17q11.2. The protein encoded by this gene is a member of the STAT family of transcription factors. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein mediates the signal transduction triggered by various cell ligands, such as IL2, IL4, CSF1, and different growth hormones. It has been shown to be involved in diverse biological processes, such as TCR signaling, apoptosis, adult mammary gland development, and sexual dimorphism of liver gene expression. This gene was found to fuse to retinoic acid receptor-alpha(RARA) gene in a small subset of acute promyelocytic leukemias(APML). The dysregulation of the signaling pathways mediated by this protein may be the cause of the APML.