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# STAT5b Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1530a

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | P51692 |
| **Other Accession** | P52632, Q9TUZ0, P42232, Q9TUM3 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Bovine, Mouse, Pig, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 89866 |
| **Antigen Region** | 760-787 |

## Additional Information

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| **Gene ID** | 6777 |
| **Other Names** | Signal transducer and activator of transcription 5B, STAT5B |
| **Target/Specificity** | This STAT5b antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 760-787 amino acids from the C-terminal region of human STAT5b. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | STAT5b Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | STAT5B |
| **Function** | Carries out a dual function: signal transduction and activation of transcription (PubMed:29844444). 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.

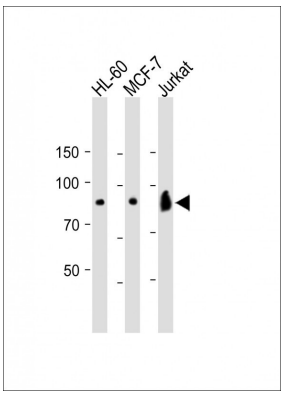
## Background

STAT5b 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 (APLL). The dysregulation of the signaling pathways mediated by this protein may be the cause of the APLL.

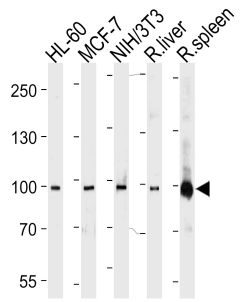
## References

Xi, S., et al., Cancer Res. 63(20):6763-6771 (2003).
Uddin, S., et al., Biochem. Biophys. Res. Commun. 308(2):325-330 (2003).
Zhang, X., et al., J. Allergy Clin. Immunol. 112(1):93-101 (2003).
Yamashita, H., et al., Oncogene 22(11):1638-1652 (2003).
Kloth, M.T., et al., J. Biol. Chem. 278(3):1671-1679 (2003).

## Images

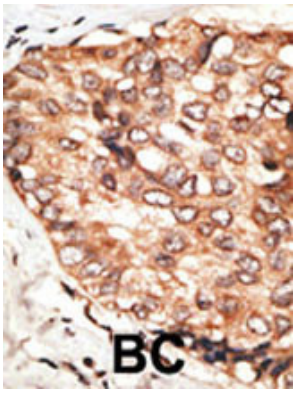



All lanes : Anti-STAT5b Antibody (C-term) at 1:1000 dilution Lane 1: HL-60 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 90kDa Blocking/Dilution buffer: 5% NFDM/TBST.




STAT5b Antibody (Cat. #AP1530a) western blot analysis in HL-60,MCF-7,mouse NIH/3T3 cell line, rat liver and spleen lysates (35ug/lane).This demonstrates the STAT5b antibody detected the STAT5b protein (arrow).

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody,




followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.