10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

STAT5b Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1530a

Product Information

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

Additional Information

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

Name	STAT5B (HGNC:11367)
Function	Signal transducer and transcription activator that mediates cellular responses to cytokines, hormones and growth factors (PubMed:29844444, PubMed:9188471). Binds to the GAS element and activates PRL-induced transcription. Positively regulates hematopoietic/erythroid differentiation.

	Involved in the oncostatin-M- mediated signaling pathway through type II OSM receptor complex (heterodimers composed of OSMR and IL6ST) (PubMed:9188471).
Cellular Location	Cytoplasm. Nucleus. Note=Translocated into the nucleus in response to phosphorylation.

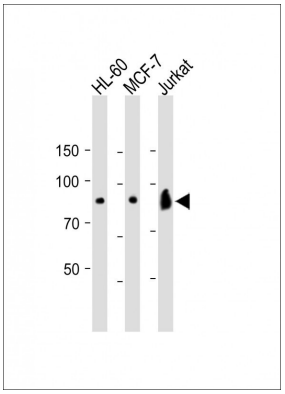
Background

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.

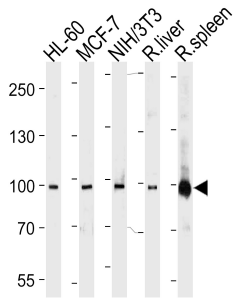
References

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

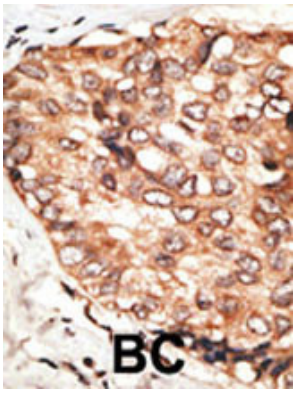


All lanes : Anti-STAT5b Antibody (C-term) at 1:1000 dilution Lane 1: HL-60 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.