

Product Name: KD-Validated STAT5B Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA00877

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 89.9kDa

Antigen Information

Gene Name	STAT5B
Alternative Names	STAT5B; Signal Transducer And Activator Of Transcription 5B; Transcription Factor STAT5B; GHISID2; STAT5
Gene ID	6777.0
SwissProt ID	P51692
Immunogen	A synthesized peptide derived from human STAT5B

Background

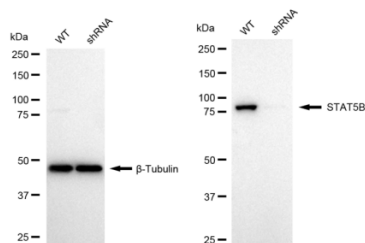
The protein encoded by this gene is a member of the STAT family of transcription factors. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as 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 (APLL). The dysregulation of the signaling pathways mediated by this protein may be the cause of the APLL. [provided by RefSeq, Jul 2008]

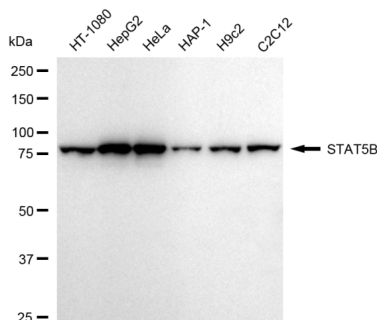
Research Area

Signal Transduction, Epigenetics and Nuclear Signaling, Cancer, Metabolism

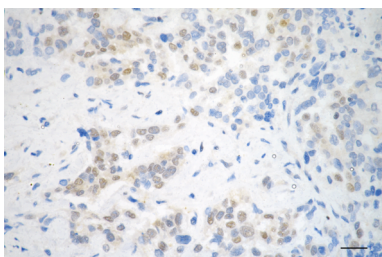
Image Data



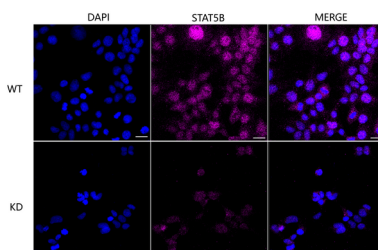
Western blotting analysis using STAT5B antibody (KVA00877). STAT5B expression in wild type (WT) and STAT5B shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with STAT5B antibody (KVA00877, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



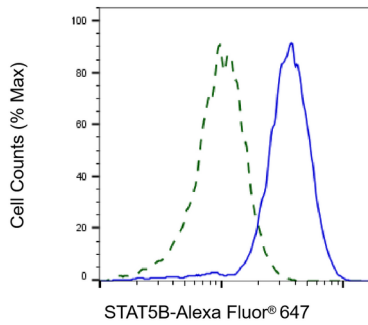
Western blotting analysis using STAT5B antibody (KVA00877). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with STAT5B antibody (KVA00877, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



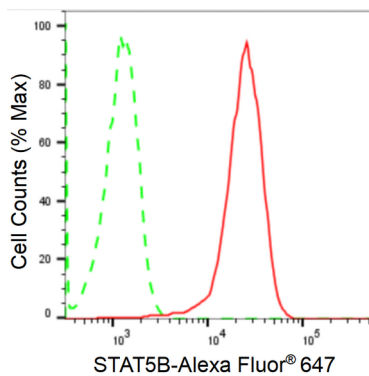
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using STAT5B antibody (KVA00877, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using STAT5B antibody (KVA00877, 1:1,000), Top panel: wild-type (WT); Bottom panel: STAT5B shRNA knockdown (KD). Nuclei were stained blue with DAPI; STAT5B was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of STAT5B knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with STAT5B antibody (KVA00877, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of STAT5B expression in HepG2 cells using STAT5B antibody (KVA00877, 1:2,000). Green, isotype control; red, STAT5B.