

Product Name: KD-Validated STAT1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01293**

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: 87.3kDa

Antigen Information

Gene Name	STAT1
Alternative Names	STAT1; Signal Transducer And Activator Of Transcription 1; Transcription Factor ISGF-3 Components P91/P84; STAT91; ISGF-3; Signal Transducer And Activator Of Transcription 1-Alpha/Beta; Signal Transducer And Activator Of Transcription 1, 91kDa; Signal Transducer And Activator Of Transcription 1, 91kD; CANDF7; IMD31A; IMD31B; IMD31C
Gene ID	6772.0
SwissProt ID	P42224
Immunogen	A synthesized peptide derived from human STAT1

Background

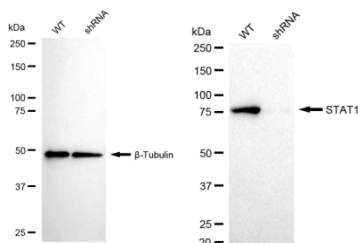
The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT

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. The protein encoded by this gene can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. The protein plays an important role in immune responses to viral, fungal and mycobacterial pathogens. Mutations in this gene are associated with Immunodeficiency 31B, 31A, and 31C. [provided by RefSeq, Jun 2020]

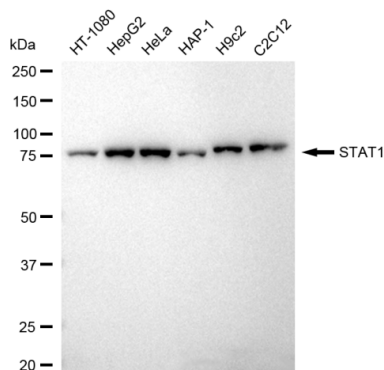
Research Area

Signal Transduction, Epigenetics and Nuclear Signaling, Microbiology, Cancer

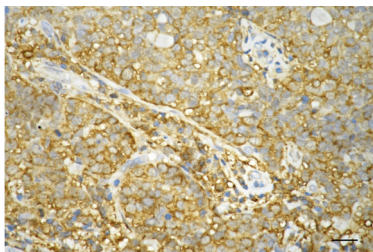
Image Data



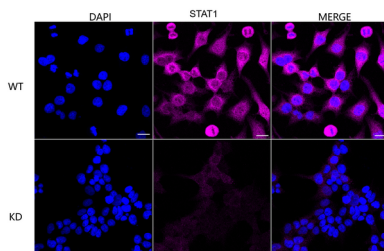
Western blotting analysis using STAT1 antibody (KVA01293). STAT1 expression in wild type (WT) and STAT1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with STAT1 antibody (KVA01293, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



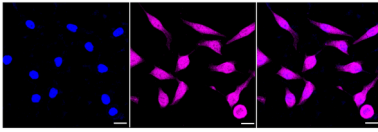
Western blotting analysis using STAT1 antibody (KVA01293). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with STAT1 antibody (KVA01293, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



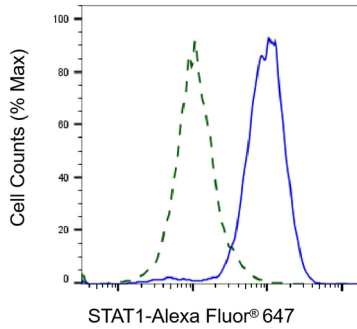
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using STAT1 antibody (KVA01293, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



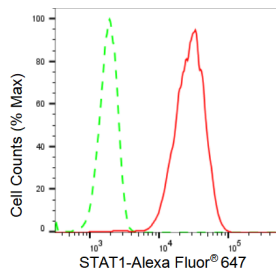
Immunocytochemical staining of HeLa cells using STAT1 antibody (KVA01293, 1:1,000). Top panel: wild-type (WT); Bottom panel: STAT1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; STAT1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HeLa cells with STAT1 antibody (KVA01293, 1:1,000). Nuclei were stained blue with DAPI; STAT1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of STAT1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with STAT1 antibody (KVA01293, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of STAT1 expression in HeLa cells using STAT1 antibody (KVA01293, 1:2,000). Green, isotype control; red, STAT1.