

Product Name: KD-Validated Janus Kinase 1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01735

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
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
Molecular Weight	Calculated MW: 133.3kDa

Antigen Information

Gene Name	JAK1
Alternative Names	JAK1; Janus Kinase 1; JAK1A; JAK1B; JTK3; Tyrosine-Protein Kinase JAK1; EC 2.7.10.2; EC 2.7.10; AIIDE; JAK-1
Gene ID	3716.0
SwissProt ID	P23458
Immunogen	A synthesized peptide derived from human JAK1

Background

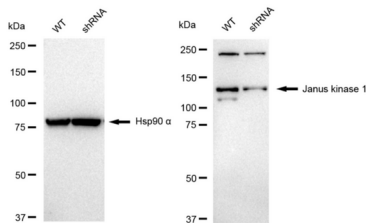
This gene encodes a membrane protein that is a member of a class of protein-tyrosine kinases (PTK) characterized by the presence of a second phosphotransferase-related domain immediately N-terminal to the PTK domain. The encoded kinase phosphorylates STAT proteins (signal transducers and activators of transcription) and plays a key role in interferon-alpha/beta,

interferon-gamma, and cytokine signal transduction. This gene plays a crucial role in effecting the expression of genes that mediate inflammation, epithelial remodeling, and metastatic cancer progression. This gene is a key component of the interleukin-6 (IL-6)/JAK1/STAT3 immune and inflammation response and is a therapeutic target for alleviating cytokine storms. The kinase activity of this gene is directly inhibited by the suppressor of cytokine signalling 1 (SOCS1) protein. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2020]

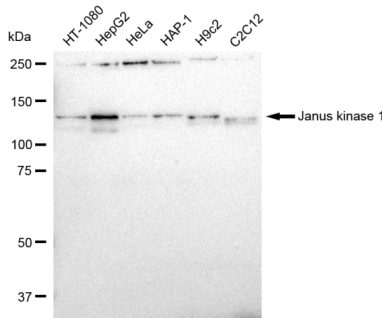
Research Area

Cell Biology,Signal Transduction,Epigenetics and Nuclear Signaling,Cancer

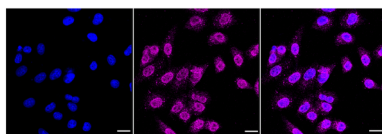
Image Data



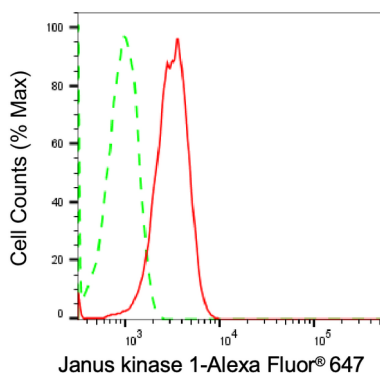
Western blotting analysis using janus kinase 1 antibody (KVAAb01735). Janus kinase 1 expression in wild type (WT) and janus kinase 1 (JAK1) shRNA knockdown (KD) 293T cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with janus kinase 1 antibody (KVAAb01735, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Janus kinase 1 antibody (KVAAb01735). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Janus kinase 1 antibody (KVAAb01735, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Janus kinase 1 antibody (KVAAb01735, 1:1,000). Nuclei were stained blue with DAPI; Janus kinase 1 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.



Flow cytometric analysis of Janus kinase 1 expression in HepG2 cells using Janus kinase 1 antibody (KVAAb01735, 1:2,000). Green, isotype control; red, Janus kinase 1.