Product Datasheet

JAK1 Rabbit mAb

Catalog No: #49674

Package Size: #49674-1 50ul #49674-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

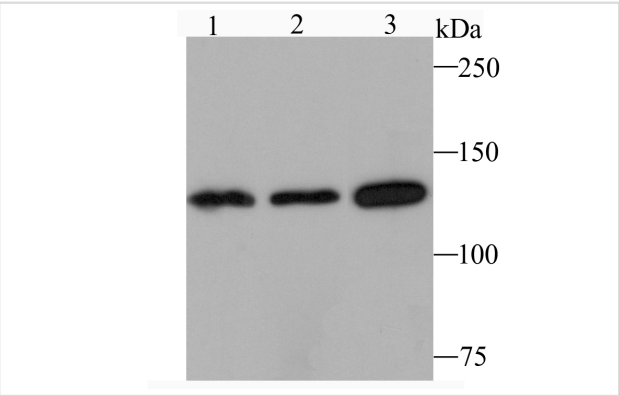
Description

Product Name	JAK1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JM75-03
Purification	ProA affinity purified
Applications	WB, IHC, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Recombinant protein
Other Names	JAK 1 antibody JAK 1A antibody JAK 1B antibody JAK-1 antibody JAK1 antibody JAK1_HUMAN antibody JAK1A antibody JAK1B antibody Janus kinase 1 (a protein tyrosine kinase) antibody Janus kinase 1 antibody JTK3 antibody Tyrosine protein kinase JAK 1 antibody Tyrosine protein kinase JAK1 antibody Tyrosine-protein kinase JAK1 antibody
Accession No.	Swiss-Prot#:P23458
Uniprot	P23458
GeneID	3716;
Calculated MW	133 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

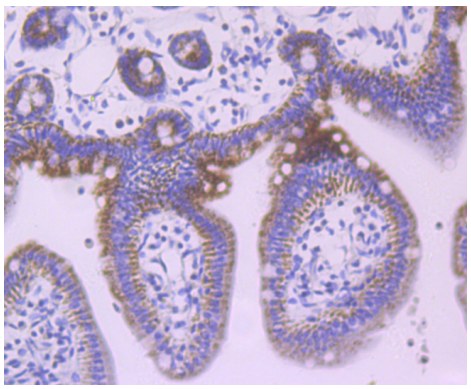
Application Details

WB: 1:500-1:1,000 IHC: 1:50FC: 1:50-1:100

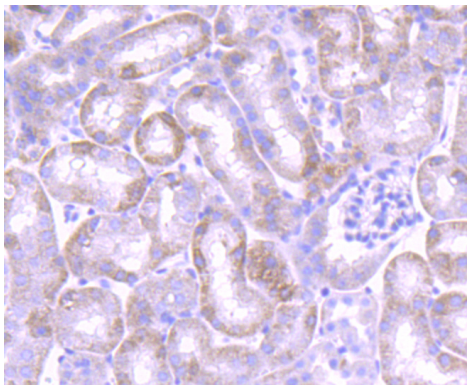
Images



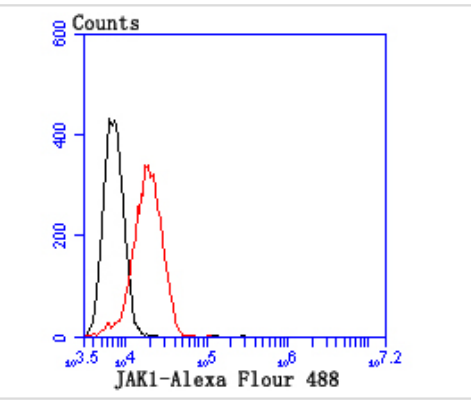
Western blot analysis of JAK1 on Hela cell using anti-JAK1 antibody at 1/1,000 dilution.
Positive control: Lane 1: PC-12 Lane 2: Jurkat Lane 3: NIH-3T3



Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-JAK1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-JAK1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of SW480 cells with JAK1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Background

JAK1 (Janus kinase 1) belongs to the family of non-receptor Janus tyrosine kinases, which regulate a spectrum of cellular functions downstream of activated cytokine receptors in the lympho-hematopoietic system. Immunological stimuli, such as interferons and cytokines, induce recruitment of Stat transcription factors to cytokine receptor-associated JAK1. JAK1 then phosphorylates proximal Stat factors, which subsequently dimerize, translocate to the nucleus and bind to cis elements upstream of target gene promoters to regulate transcription. Upon ligand binding, JAK1 undergoes tyrosine phosphorylation and catalytic activation in an interdependent manner. Phosphorylation of tyrosine residues at position 1022 and 1023 is believed to function in the activation of catalytic events. The canonical JAK-Stat pathway is integral to maintaining a normal immune system by stimulating proliferation, differentiation, survival, and host resistance to pathogens. Altering JAK-Stat signaling to reduce cytokine induced pro-inflammatory responses represents an attractive target for anti-inflammatory therapies.

References

Note: This product is for in vitro research use only