Anti-JAK2 Antibody

RT1343

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IF, IHC-P
Molecular Wt:	128kDa

Description: JAK2 (Janus kinase 2) belongs to the emerging 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 JAK2. JAK2 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. 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

Immunogen: A peptide mapping at the C-terminus of JAK2 of mouse origin

Positive control: human kidney tissue

Subcellular location: Cytoplasm, Nucleus, Endomembrane system

Database links: SwissProt: O60674 Human

Recommended Dilutions:

WB	1:100-1:1,000
IP	1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)
IF	1:50-1:500
IHC-P	1:50-1:500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4℃, “DO NOT FREEZE”.

Purity: Protein A affinity purified.

Images

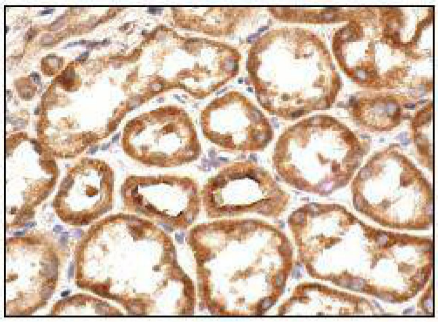

Fig1: Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

Background References

1. Prchal-Murphy, M., et al. 2012. TYK2 kinase activity is required for functional type I interferon responses in vivo. PLoS ONE 7: e39141.
2. Su, K.H., et al. 2011. β common receptor integrates the erythropoietin signaling in activation of endothelial nitric oxide synthase. J. Cell. Physiol. 226: 3330-3339.