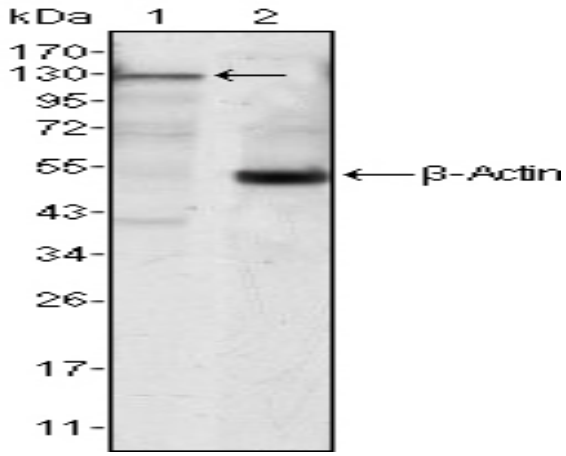
Best Tools for immunology Research

JAK3 Monoclonal Antibody

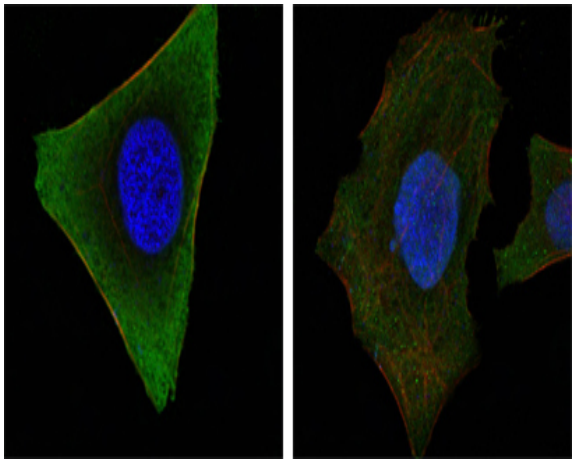
Catalog No :	YM0386
Reactivity :	Human;Mouse
Applications :	WB;IF;FCM;ELISA
Target :	JAK3
Fields :	>>Chemokine signaling pathway;>>PI3K-Akt signaling pathway;>>Necroptosis;>>Signaling pathways regulating pluripotency of stem cells;>>JAK-STAT signaling pathway;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>Hepatitis B;>>Measles;>>Human T-cell leukemia virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral carcinogenesis;>>Non-small cell lung cancer;>>Primary immunodeficiency
Gene Name :	JAK3
Protein Name :	Tyrosine-protein kinase JAK3
Human Gene Id :	3718
Human Swiss Prot No :	P52333
Mouse Gene Id :	16453
Mouse Swiss Prot No :	Q62137
Immunogen :	Purified recombinant fragment of human JAK3 expressed in E. Coli.
Specificity :	JAK3 Monoclonal Antibody detects endogenous levels of JAK3 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	125kD
Cell Pathway :	Chemokine;Jak_STAT;Primary immunodeficiency;
P References :	1. J Biol Chem. 1995 Oct 20;270(42):25028-36. 2. Proc Natl Acad Sci U S A. 1994 Jul 5;91(14):6374-8. 3. Leuk Lymphoma. 2002 Dec;43(12):2355-62.
Background :	The protein encoded by this gene is a member of the Janus kinase (JAK) family of tyrosine kinases involved in cytokine receptor-mediated intracellular signal transduction. It is predominantly expressed in immune cells and transduces a signal in response to its activation via tyrosine phosphorylation by interleukin receptors. Mutations in this gene are associated with autosomal SCID (severe combined immunodeficiency disease). [provided by RefSeq, Jul 2008],
Function :	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:Defects in JAK3 are a cause of severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-positive/NK-cell-negative (T(-)B(+)NK(-)SCID) [MIM:600802]. SCID refers to a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients with SCID present in infancy with recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.,domain:Possesses two phosphotransferase domains. The second one probably contains the catalytic domain (By similarity), while the presence of slight differences suggest a different role
Subcellular Location :	Endomembrane system ; Peripheral membrane protein . Cytoplasm .
Expression :	In NK cells and an NK-like cell line but not in resting T-cells or in other tissues. The S-form is more commonly seen in hematopoietic lines, whereas the B-form is detected in cells both of hematopoietic and epithelial origins.
Sort :	8780
No4 :	1

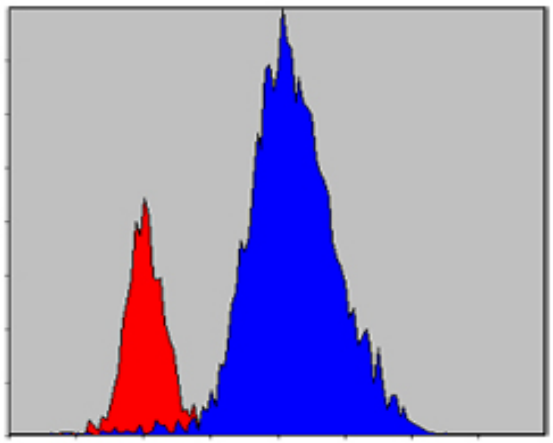
Products Images



Western Blot analysis using JAK3 Monoclonal Antibody against Jurkat cell lysate (1).



Confocal immunofluorescence analysis of Hela (left) and HepG2 (right) cells using JAK3 Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Hela cells using JAK3 Monoclonal Antibody (blue) and negative control (red).