

产品名称: JAK2 (14B16) Rabbit Monoclonal Antibody
产品货号: AMRe12818



产品概述 (Summary)

产品名称 (Production Name)	JAK2 (14B16) Rabbit Monoclonal Antibody
描述 (Description)	Recombinant rabbit monoclonal antibody
宿主 (Host)	Rabbit
应用 (Application)	WB, ICC/IF, IP
种属反应性 (Reactivity)	Human, Mouse, Rat

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Monoclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% protective protein.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	JAK2
别名 (Alternative Names)	EC 2.7.10.2; JAK-2; JAK2; Janus kinase 2; kinase Jak2; JTK10; THCYT3;
基因 ID (Gene ID)	3717.0
蛋白 ID (SwissProt ID)	O60674.A synthetic peptide of human JAK2

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000, ICC/IF 1:100-1:200, IP 1:50-1:100
蛋白分子量 (Molecular Weight)	131kDa

研究背景 (Background)

Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription.

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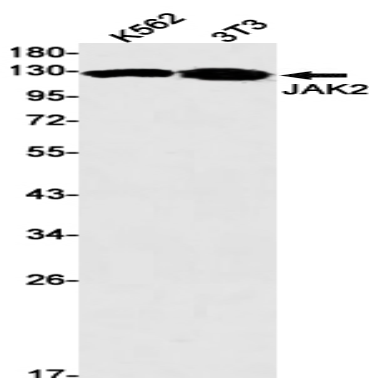
For example, cell stimulation with erythropoietin (EPO) during erythropoiesis leads to JAK2 autophosphorylation, activation, and its association with erythropoietin receptor (EPOR) that becomes phosphorylated in its cytoplasmic domain. Then, STAT5 (STAT5A or STAT5B) is recruited, phosphorylated and activated by JAK2. Non-receptor tyrosine kinase involved in various processes such as cell growth, development, differentiation or histone modifications. Mediates essential signaling events in both innate and adaptive immunity. In the cytoplasm, plays a pivotal role in signal transduction via its association with type I receptors such as growth hormone (GHR), prolactin (PRLR), leptin (LEPR), erythropoietin (EPOR), thrombopoietin (THPO); or type II receptors including IFN- α , IFN- β , IFN- γ and multiple interleukins (PubMed: [7615558](http://www.uniprot.org/citations/7615558)). Following ligand-binding to cell surface receptors, phosphorylates specific tyrosine residues on the cytoplasmic tails of the receptor, creating docking sites for STATs proteins (PubMed: [9618263](http://www.uniprot.org/citations/9618263)). Subsequently, phosphorylates the STATs proteins once they are recruited to the receptor. Phosphorylated STATs then form homodimer or heterodimers and translocate to the nucleus to activate gene transcription. For example, cell stimulation with erythropoietin (EPO) during erythropoiesis leads to JAK2 autophosphorylation, activation, and its association with erythropoietin receptor (EPOR) that becomes phosphorylated in its cytoplasmic domain. Then, STAT5 (STAT5A or STAT5B) is recruited, phosphorylated and activated by JAK2. Once activated, dimerized STAT5 translocates into the nucleus and promotes the transcription of several essential genes involved in the modulation of erythropoiesis. Part of a signaling cascade that is activated by increased cellular retinol and that leads to the activation of STAT5 (STAT5A or STAT5B) (PubMed: [21368206](http://www.uniprot.org/citations/21368206)). In addition, JAK2 mediates angiotensin-2-induced ARHGEF1 phosphorylation (PubMed: [20098430](http://www.uniprot.org/citations/20098430)). Plays a role in cell cycle by phosphorylating CDKN1B (PubMed: [21423214](http://www.uniprot.org/citations/21423214)). Cooperates with TEC through reciprocal phosphorylation to mediate cytokine-driven activation of FOS transcription. In the nucleus, plays a key role in chromatin by specifically mediating phosphorylation of 'Tyr-41' of histone H3 (H3Y41ph), a specific tag that promotes exclusion of CBX5 (HP1 α) from chromatin (PubMed: [19783980](http://www.uniprot.org/citations/19783980)).

研究领域 (Research Area)

Cell Biology

图片 (Image Data)

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Western blot detection of JAK2 in K562,3T3 cell lysates using JAK2 antibody(1:1000 diluted).

注意事项 (Note)

For research use only .