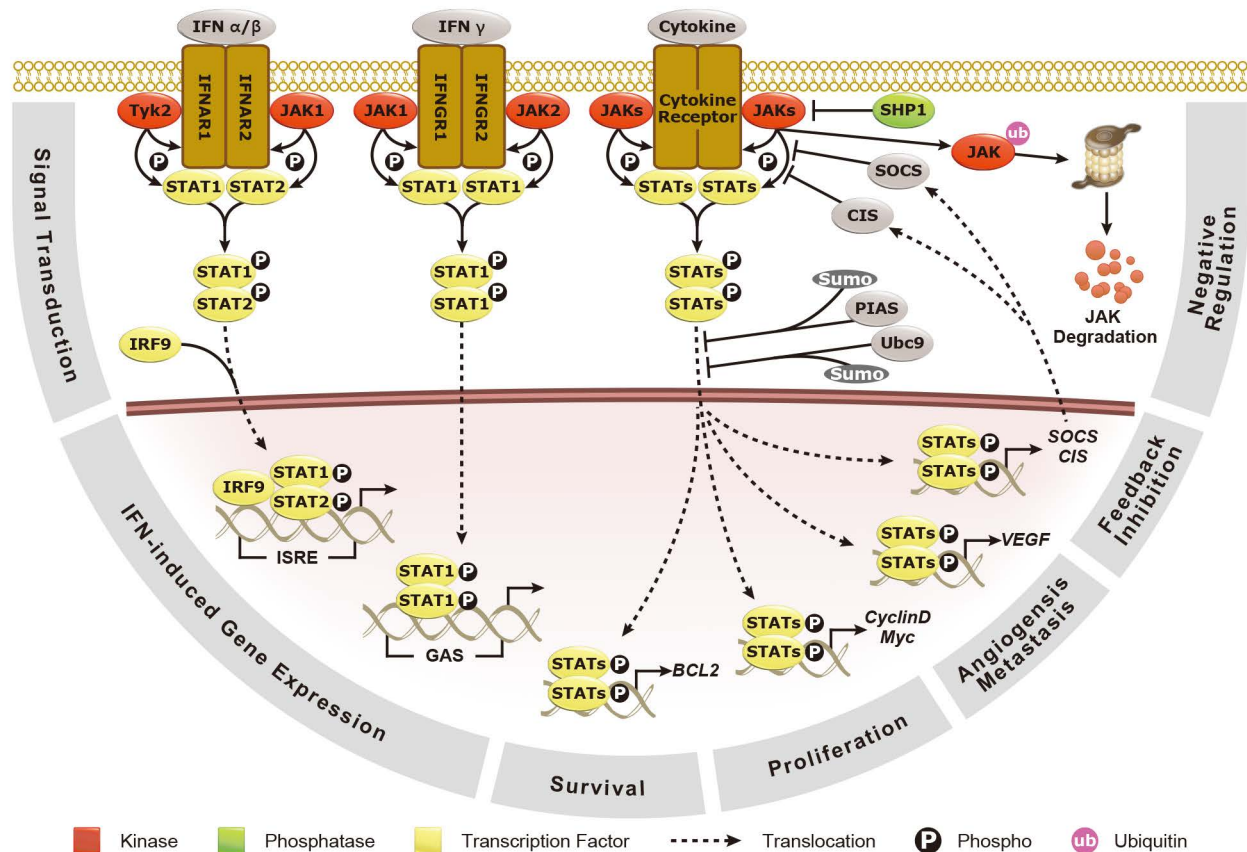


# JAK-STAT Pathway: Cytokine Signaling



The JAK/STAT pathway is a key regulator of cell proliferation, differentiation, migration, apoptosis, and survival. It plays a critical role in many biological processes, especially in hematopoietic development and immune responses. The signaling is initiated upon the binding of cytokines to their cognate receptors. This then causes receptor dimerization, resulting in the trans-phosphorylation of the recruited Janus kinases (JAKs). The activated JAKs phosphorylate their downstream factor, signal transducer and activator of transcriptions (STATs). These p-STATs in turn translocate to the nucleus and act as dimers to regulate the expression of target genes. Dysregulation of JAK-STAT signaling leads to several immune disorders, such as hyperIgE syndrome, erythremia, and leukemia.

## Janus kinase (JAK)

Cat. No.	Product	Host	Reactivity	Application
GTX101955	JAK1 antibody	Rb pAb	Hu	ICC/IF, WB
GTX113218	JAK1 antibody [N2C1], Internal	Rb pAb	Hu	WB
GTX50466	JAK1 antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX25493	JAK1 (pY1022/Y1023) antibody	Rb pAb	Hu, Ms	WB
GTX79032	JAK1 (pY1022) antibody	Rb pAb	Hu, Ms, Rat	IHC, WB
GTX50207	JAK1 (pY1022) antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX50208	JAK2 (pY1007) antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX101132	JAK2 antibody	Rb pAb	Hu	WB
GTX50467	JAK2 antibody	Rb pAb	Hu, Ms, Rat	WB
GTX50657	Jak2 antibody	Rb pAb	Hu, Rat	IHC-P
GTX62400	JAK2 antibody [EPR108(2)]	Rb mAb	Hu, Ms, Rat	ICC/IF, WB
GTX79031	JAK2 (pY221) antibody	Rb pAb	Hu, Ms, Rat	IHC
GTX61122	JAK2 (pY1007/Y1008) antibody [E132]	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IHC-M, IP, WB
GTX38581	JAK2 (pY1007) antibody	Rb pAb	Hu, Ms, Rat	IHC-P, WB
GTX50208	JAK2 (pY1007) antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX61400	JAK3 antibody [EP909Y]	Rb mAb	Hu	FACS, IP, WB
GTX83303	JAK3 antibody [5H2]	Ms mAb	Hu, Ms	ELISA, FACS, ICC/IF
GTX23301	JAK3 antibody [A1-14-16]	Ms mAb	Hu, Ms	IHC-P, IP, WB
GTX103938	Tyk2 antibody	Rb pAb	Hu	ICC/IF, WB
GTX61449	Tyk2 antibody [EP1127Y]	Rb mAb	Hu, Ms, Rat	ICC/IF, IHC, IHC-M, IP, WB

## Signal transducer and activator of transcription (STAT)

Cat. No.	Product	Host	Reactivity	Application
GTX63062	STAT1 antibody [EPR4407]	Rb mAb	Hu, Rat	FACS, ICC/IF, IHC, IP, WB
GTX23987	STAT1 antibody [SM1]	Ms mAb	Hu, Ms	IP, WB
GTX50118	STAT1 (pY701) antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX50217	STAT1 (pS727) antibody	Rb pAb	Hu, Ms, Rat	ICC/IF, IHC, IHC-P, WB
GTX83552	STAT1 antibody [4H9]	Ms mAb	Hu, Dog, Mk	ICC/IF, IHC, WB
GTX83550	STAT1 antibody [15H3]	Ms mAb	Hu	ICC/IF, IHC, WB
GTX113010	STAT1 antibody [N2C2], Internal	Rb pAb	Hu	ICC/IF, WB
GTX103117	STAT2 antibody [C2C3], C-term	Rb pAb	Hu	IHC-P, IP, WB
GTX61156	STAT2 antibody [Y141]	Rb mAb	Hu, Rat	ICC/IF, IHC, WB
GTX50721	STAT2 (pY690) antibody	Rb pAb	Hu	WB
GTX59571	STAT2 (pY689) antibody	Rb pAb	Hu, Ms	WB
GTX104616	STAT3 antibody [C3], C-term	Rb pAb	Hu, Ms, Rat	ICC/IF, WB
GTX61865	STAT3 antibody [EPR787Y]	Rb mAb	Hu, Ms, Rat	ICC/IF, IP, WB
GTX82752	STAT3 antibody [3B5]	Ms mAb	Hu, Ms, Mk	ELISA, ICC/IF, IHC
GTX61820	STAT3 (pY705) antibody [EP2147Y]	Rb mAb	Hu, Ms	ICC/IF, IHC, IP, WB
GTX78940	STAT3 (pY705) antibody	Rb pAb	Hu, Ms, Rat	IHC, WB
GTX50120	STAT3 (pS727) antibody [E121-31]	Rb pAb	Hu, Ms, Rat	ICC/IF, IHC, IHC-P, WB
GTX61939	STAT4 antibody [EP1900Y]	Rb mAb	Hu	FACS, ICC/IF, IHC, IP, WB
GTX50403	STAT4 antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX83548	STAT4 antibody [2A2]	Ms mAb	Hu	IHC, WB
GTX78939	STAT4 (pY693) antibody	Rb pAb	Hu, Ms, Rat	IHC, WB
GTX50121	STAT4 (pY693) antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX113351	STAT5 $\alpha$ antibody	Rb pAb	Hu	ICC/IF, WB
GTX61098	STAT5 $\alpha$ antibody [E289]	Rb mAb	Hu, Rat	FACS, ICC/IF, IHC, IP, WB
GTX78938	STAT5A (pY694) antibody	Rb pAb	Hu, Ms, Rat	IHC, WB
GTX61079	STAT5 (pY694) antibody [E208]	Rb mAb	Hu, Ms	ICC/IF, IHC, IHC-M, IP, WB
GTX48648	STAT5 (pY694) antibody [5F6.F1]	Ms mAb	Hu, Ms, Rat	ELISA, ICC/IF, IHC, WB
GTX78937	STAT5A (pS780) antibody	Rb pAb	Hu, Ms, Rat	IHC, WB
GTX50123	STAT5A (pS780) antibody	Rb pAb	Hu, Ms, Rat	IHC, IHC-P, WB
GTX82807	STAT5 $\beta$ antibody [5B3]	Ms mAb	Hu	ELISA
GTX113273	STAT6 antibody	Rb pAb	Hu, Ms	IHC-P, IP, WB, ChIP
GTX61148	STAT6 antibody [YE361]	Rb mAb	Hu, Ms	ICC/IF, IHC, IHC-M, IP, WB
GTX82814	STAT6 antibody [7D3]	Ms mAb	Hu, Ms, Mk, Rat	ELISA, ICC/IF, WB
GTX78936	STAT6 (pT645) antibody	Rb pAb	Hu	IHC
GTX78935	STAT6 (pY641) antibody	Rb pAb	Hu, Ms, Rat	IHC, WB

## Interferon (IFN)

Cat. No.	Product	Host	Reactivity	Application
GTX11408	IFN alpha antibody [G16]	Ms mAb	Hu, Pig	ELISA, Neut, WB, Functional Assay
GTX51519	IFN alpha antibody	Rb pAb	Hu	ELISA, ICC/IF, IHC-F, IHC-P, IP, WB
GTX40497	IFN beta antibody [BG6]	Ms mAb	Hu	ELISA, WB
GTX11409	IFN beta antibody	Shp pAb	Hu	Neut, Functional Assay
GTX11759	IFN gamma antibody	Rb pAb	Hu	WB
GTX52437	IFN gamma antibody [MAB0854]	Rat mAb	Ms	IHC-Fr, Neut

## Interferon (IFN)

Cat. No.	Product	Host	Reactivity	Application
GTX102902	IFNAR1 antibody	Rb pAb	Hu, Ms	WB
GTX105770	IFNAR2 antibody	Rb pAb	Hu	ICC/IF, WB
GTX11285	IFNGR1 antibody [BB1E2]	Ms mAb	Hu	ELISA, FACS, IHC-Fr, WB
GTX60200	IFNGR1 antibody	Rb pAb	Ms, Rat	ELISA, ICC/IF, IHC-P, WB

## Regulators

Cat. No.	Product	Host	Reactivity	Application
GTX100657	SOCS1 antibody	Rb pAb	Hu	IHC-P, WB, ELISA-Ag
GTX62828	SOCS2 antibody [EPR2588(2)]	Rb mAb	Hu, Ms, Rat	ICC/IF, IP, WB
GTX104720	SOCS3 antibody	Rb pAb	Hu	IHC-P, WB
GTX104721	SOCS4 antibody	Rb pAb	Hu	ICC/IF, WB, ELISA-Ag
GTX104722	SOCS5 antibody	Rb pAb	Hu	IHC-P, WB, ELISA-Ag
GTX62050	PIAS1 antibody [EPR2581Y]	Rb mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC, IHC-M, IP, WB
GTX115180	PIAS2 antibody	Rb pAb	Hu, Ms	IHC-P, WB
GTX88188	PIAS2 antibody	Gt pAb	Hu, Ms, Cow, Dog, Rat	ELISA, WB
GTX77910	PIAS3 antibody	Rb pAb	Hu	IHC, WB
GTX102864	SHP1 antibody	Rb pAb	Hu, Ms, Rat	IHC-P, IP, WB
GTX102865	SHP1 antibody	Rb pAb	Hu, Ms	ICC/IF, WB
GTX100216	CIS antibody [C2C3], C-term	Rb pAb	Hu, Rat	ICC/IF, IHC-P, WB
GTX129293	UBC9 antibody	Rb pAb	Hu, Ms	IHC-P, WB

