

Recombinant Human Janus Kinase 2, GST-tagged

Cat. No. JAK2-5439H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human JAK2, catalytic and pseudokinase domain (aminoacids 532-1132) with GST tag. Activated in vitro via auto-phosphorylation.
Species	Human
Source	Insect Cells
ProteinLength	532-1132 a.a.
Description	JAK2 is a member of intracellular non-receptor tyrosine kinases that transduce cytokine-mediated signals via the JAK-STAT pathway. JAK2 has two near-identical phosphatase-transferring domains. One domain exhibits the kinase activity while the other stabilizes the JAK conformational structure. JAK2 is the predominant JAK kinase activated in response to several growth factors and cytokines such as IL-3, GM-CSF and erythropoietin. JAK2 has been found to be constitutively associated with the prolactin receptor and is required for responses to gamma interferon.
Form	Liquid in 50 mM Tris, pH 7.5 + 150 mM NaCl + 0.5 mM EDTA + 0.02% Triton X-100 + 2 mM DTT + 50% glycerol.
Molecular Weight	97.8 kda
Storage	Stable for 6 months in working aliquots at -80°C. Avoid repeated freeze-thaw cycles.
Official Symbol	JAK2

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GENE INFORMATION

Gene Name	JAK2 Janus kinase 2 [Homosapiens]
Synonyms	JAK2; Janus kinase 2; JTK10; tyrosine-protein kinase JAK2; Janus kinase 2 (a protein tyrosine kinase); EC2.7.10.2; JAK-2; OTTHUMP00000021024; OTTHUMP00000043260
Gene ID	3717
mRNA Refseq	NM_004972
Protein Refseq	NP_004963
MIM	147796
UniProt ID	O60674
Chromosome Location	9p24
Pathway	Adipocytokine signaling pathway; CXCR4-mediated signaling events; Chemokine signaling pathway; Cholinergic synapse; Delta-Notch Signaling Pathway; EGFR1 Signaling Pathway; EPO Receptor Signaling; ErbB2/ErbB3 signaling events; ErbB4 signaling events; Growth hormone receptor signaling; Herpes simplex infection; IFN-gamma pathway; IL-2 Signaling Pathway; Immune System
Function	ATP binding; Janus kinase activity; SH2 domain binding; acetylcholine receptor binding; growth hormone receptor binding; insulin receptor substrate binding; interleukin-12 receptor binding; non-membrane spanning protein tyrosine kinase activity; nucleotide binding; peptide hormone receptor binding; phosphoinositide 3-

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kinase binding;transferase activity

**PDBrendering based
on 2b7a.**

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