Active Recombinant Human JAK2, GST-tagged

Cat. No. JAK2-81H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human JAK2 (804-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
ProteinLength	804-end 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 phosphate-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	50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Bio-activity	The specific activity was determined to be 145 nmol/min/mg
Molecular Mass	~63 kDa
Purity	>70% by densitometry.

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Applications	Kinase Assay, Western Blot
Storage	Store product at –70oC. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1 μg/μl

GENE INFORMATION

Gene Name	JAK2 Janus kinase 2 [Homo sapiens]
Official Symbol	JAK2
Synonyms	JAK2; Janus kinase 2; tyrosine-protein kinase JAK2; JTK10; JAK-2; Janus kinase 2 (a protein tyrosine kinase); THCYT3;
Gene ID	3717
mRNA Refseq	NM_004972
Protein Refseq	NP_004963
MIM	147796
UniProt ID	O60674
Chromosome Location	9p24
Pathway	Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine

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	signaling pathway, conserved biosystem; CXCR4-mediated signaling events, organism-specific biosystem; Chemokine signaling pathway, organism-specific biosystem; Chemokine signaling pathway, conserved biosystem; Cholinergic synapse, organism-specific biosystem; Cytokine Signaling in Immune system, organism-specific biosystem;
Function	ATP binding; SH2 domain binding; growth hormone receptor binding; heme binding; histone binding; histone kinase activity (H3-Y41 specific); interleukin-12 receptor binding; non-membrane spanning protein tyrosine kinase activity; nucleotide binding; protein binding; protein kinase activity; protein kinase binding; protein tyrosine kinase activity; protein tyrosine kinase activity; receptor binding;

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