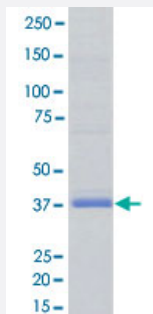


Bioactive

JAK2 (Human) Recombinant Protein

Catalog # P5722 Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

Specification

Product Description	Human JAK2 (NP_004963.1, 826 a.a. - 1132 a.a.) partial recombinant protein with His tag expressed in Baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	39
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Ni-NTA affinity chromatography and anion exchange chromatography
Purity	84 % by SDS-PAGE/CBB staining.

Activity	The activity was measured by off-chip mobility shift assay. The enzyme was incubated with fluorescence-labeled substrate and Mg (or Mn)/ATP. The phosphorylated and unphosphorylated substrates were separated and detected by LabChip™3000. Substrate : Src tide. ATP: 100 μM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.05% Brij35, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — JAK2

Entrez GeneID	3717
Protein Accession#	NP_004963.1
Gene Name	JAK2
Gene Alias	JTK10
Gene Description	Janus kinase 2 (a protein tyrosine kinase)
Omim ID	147796 187950 254450 263300 600880 601626
Gene Ontology	Hyperlink
Gene Summary	This gene product is a protein tyrosine kinase involved in a specific subset of cytokine receptor signaling pathways. It has been found to be constitutively associated with the prolactin receptor and is required for responses to gamma interferon. Mice that do not express an active protein for this gene exhibit embryonic lethality associated with the absence of definitive erythropoiesis. [provided by RefSeq]
Other Designations	Janus kinase 2 OTTHUMP00000021024 OTTHUMP00000043260 tyrosine-protein kinase JAK2

Pathway

- [Adipocytokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Jak-STAT signaling pathway](#)

Disease

- [Acute Disease](#)
- [Anemia](#)
- [Arterial Occlusive Diseases](#)
- [Asthma](#)
- [Blast Crisis](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Budd-Chiari Syndrome](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)

- [DNA Damage](#)
- [Down Syndrome](#)
- [Edema](#)
- [Fetal Death](#)
- [Fetal Growth Retardation](#)
- [Genetic Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Hematologic Neoplasms](#)
- [Hemorrhage](#)
- [Hepatic Vein Thrombosis](#)
- [Hepatitis B](#)
- [Hypertension](#)
- [Infant](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Iron Overload](#)
- [Leukemia](#)
- [Leukocytosis](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Mediastinal Neoplasms](#)
- [Multiple Sclerosis](#)
- [Myelodysplastic Syndromes](#)
- [Myelofibrosis](#)

- [Myeloproliferative Disorders](#)
- [Myocardial Infarction](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Obesity](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Philadelphia Chromosome](#)
- [Polycythemia](#)
- [Polycythemia Vera](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Primary Myelofibrosis](#)
- [Pruritus](#)
- [Pulmonary Embolism](#)
- [Respiratory Syncytial Virus Infections](#)
- [Splenomegaly](#)
- [Spondylitis](#)
- [Stroke](#)
- [Thrombocythemia](#)
- [Thrombocytopenia](#)
- [Thrombocytosis](#)
- [Thromboembolism](#)
- [Thrombophilia](#)
- [Thrombosis](#)
- [Thyroid Neoplasms](#)

- [Tobacco Use Disorder](#)
- [Translocation](#)
- [Trisomy](#)
- [Vascular Diseases](#)
- [Venous Thrombosis](#)
- [Viremia](#)