

## JAK1 (E966V) Protein

Recombinant human protein expressed in Sf9 cells

**Catalog # J01-12CG**

Lot # H2810-10

### Product Description

Recombinant human JAK1 (E966V) (438-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The gene accession number is [NM\\_002227](#).

### Gene Aliases

JAK1A, JAK1B

### Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

### Storage and Stability

Store product at -70°C. 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.

### Scientific Background

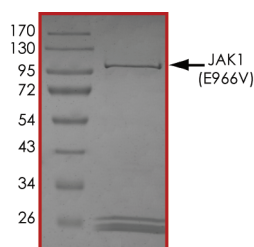
JAK1 is a member of protein-tyrosine kinases (PTK) characterized by the presence of a second phosphotransferase-related domain immediately N-terminal to the PTK domain. JAK1 bears all the hallmarks of a protein kinase, although its structure differs significantly from that of the PTK and threonine/serine kinase family members. JAK1 is a large, widely expressed membrane-associated phosphoprotein that is involved in the interferon-alpha/beta and -gamma signal transduction pathways (1). JAK1 plays an essential and nonredundant role in promoting biologic responses induced by a select subset of cytokine receptors, including those in which JAK utilization is thought to be nonspecific(2).

### References

1. Muller, M.et.al: The protein tyrosine kinase JAK1 complements defects in interferon-alpha/beta and -gamma signal transduction. Nature 366: 129-135, 1993.
2. Rodig, S. J.et.al: Disruption of the Jak1 gene demonstrates obligatory and nonredundant roles of the Jaks in cytokine-induced biologic responses. Cell 93: 373-383, 1998

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### Purity



The purity of JAK1 (E966V) was determined to be **>70%** by densitometry.  
JAK1 Approx. MW **105kDa**.

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Lot # H2810-10

Purity >70%

Concentration 0.05 µg/µl

Stability 1yr at -70°C from date of shipment

Storage & Shipping Store product at -70°C. 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. Product shipped on dry ice.

**FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.**

"THIS PRODUCT SHALL NOT BE USED TO COMMERCIALY SCREEN DRUG MOLECULES DEVELOPED AS JAK1 OR JAK1 INHIBITORS. ANY SUCH ACTIVITY WILL BE OUTSIDE THE SCOPE OF THE RESEARCH USE ONLY LABEL LICENCE" THE PRODUCT IS PROTECTED BY THE FOLLOWING PATENTS: US5,910,426; US5,852,184; US5,821,069; US5,716,818,US5,658,791

# MATERIAL SAFETY DATA SHEET

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## Article 1 - Product Identification and Use

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**Product Name: JAK1 (E966V) Protein**

**Catalog # J01-12CG**

*This product is sold only for research use by qualified laboratory personnel, and is not to be used as a drug, medical device, food additive, cosmetic, nor household chemical. It is not to be used in diagnostic, therapeutic, consumer, agricultural, nor pesticidal applications.*

Manufacturer's Name: SignalChem Pharmaceuticals Inc.  
Street Address: 110-13120 Vanier Place  
City, Prov. Postal Code: Richmond, BC, V6V 2J2  
Fax: 604-232-4601  
EMERGENCY PHONE: 604-232-4600

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## Article 2 - Hazardous Ingredients

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NOT AVAILABLE. We are not aware of any hazards associated with this product or its ingredients, but the chemical, physical, and toxicological properties of this product have not been investigated thoroughly. Observe normal laboratory precautions.

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## Article 3 - Physical Data

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This product consists of purified protein in Tris-HCl buffer shipped on dry ice. The physical properties of this product have not been investigated thoroughly.

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## Article 4 - Fire and Explosion Hazard

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NOT APPLICABLE

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## Article 5 - Reactivity Data

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NOT APPLICABLE

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## Article 6 - Toxicologically Data

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May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

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## Article 7 - Preventative Measures

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Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

\*\*\*\*\*MULTIPLE COMPONENT SPILL OR LEAK PROCEDURES\*\*\*\*\*

- Wear protective equipment.
  - Absorb on sand or vermiculite and place in closed containers for disposal.
  - Observe all federal, state and local environmental regulations.
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## Article 8 - First Aid Measures

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- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
  - In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
  - If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
  - In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.
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## Article 9 - Preparation

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Prepared by: Jun Yan

Phone#: 1-866-954-6273

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