JAK2
Rabbit Anti-Human Janus Kinase 2 pAb

Catalog No.	CSI10242	**Quantity:**	100 µl

Alternate Names: JTK10, Janus kinase 2, tyrosine-protein kinase JAK2

Description: JAK2 PAN PAb; Unconjugated Polyclonal antibody specific to Human, Mouse, (Rat) JAK2. This antibody is validated for use in Western Blot. Anti-JAK2 recognizes the expressed product of the JAK2 gene. This antibody contains 50% glycerol, which improves the stability and longevity of this antibody.

Gene ID: 3717

Purity: Purified from rabbit serum by epitope-specific affinity chromatography.

Host: Rabbit

Immunogen: The antiserum was produced against a chemically synthesized peptide derived from the C-terminal region of human JAK2. The sequence is conserved in mouse and rat.

Target Summary: Janus Activating Kinase 2 (JAK2) is a 130 kDa tyrosine kinase involved in cytoplasmic signal transduction. Ligand binding to a variety of cell surface receptors (e.g., cytokine, growth factor,
GPCRs) leads to an association of those receptors with JAK proteins, which are then activated via phosphorylation on tyrosines 1007 and 1008 in the kinase activation loop. Activated JAK proteins phosphorylate and activate STAT (signal transducers and activators of transcription) proteins, which then dimerize and translocate to the nucleus. Once in the nucleus, STAT proteins bind to DNA and modify the transcription of various genes, which can lead to various responses such as cell proliferation, cell survival and

Formulation: Rabbit polyclonal immunoglobulin in Dulbecco's phosphate buffered saline (without Mg^{2+} and Ca^{2+}) + pH 7.3 (+/- 0.1) + 50% glycerol with 1.0 mg/mL BSA (IgG, protease free) as a carrier.

Preservative: 0.05% sodium azide. **Precaution:** Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.

Positive Control Used: Human epidermoid carcinoma (A431) cells; mouse NIH3T3 cells

Reactivity: Human and mouse JAK2. Rat (100% homologous) has not been tested but is expected to react

Applications: This antibody has been used in Western blotting. Other applications may work but have not been tested.

Application Notes: For Western blotting applications, we recommend using the antibody at a 1:1,000 starting dilution.
The optimal antibody concentration should be determined empirically for each specific application.

Storage & Stability: Store at -20°C. We recommend a brief centrifugation before opening to settle vial contents. Then, apportion into working aliquots and store at −20°C. For shipment or short-term storage (up to one week), 2-8°C is sufficient.
Expires one year from date of receipt when stored as instructed.

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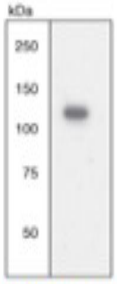
10% Tris-glycine gel and
transferred to PVDF. The membrane was blocked with a 5% BSATBST buffer for one hour at room temperature, and then incubated with the JAK2 antibody for two hours at room temperature in a 1% BSA-TBST buffer. After washing, the membrane was incubated with goat F (ab') 2 anti-rabbit IgG HRP-conjugate and signals were detected using the Pierce SuperSignal™ method.



Western Blot.

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