

Datasheet for ABIN5518768  
**anti-JAK1 antibody (N-Term)**



[Go to Product page](#)

1 Image

1 Publication

## Overview

|                      |                                     |
|----------------------|-------------------------------------|
| Quantity:            | 100 µg                              |
| Target:              | JAK1                                |
| Binding Specificity: | AA 78-115, N-Term                   |
| Reactivity:          | Human, Mouse, Rat                   |
| Host:                | Rabbit                              |
| Clonality:           | Polyclonal                          |
| Conjugate:           | This JAK1 antibody is un-conjugated |
| Application:         | Western Blotting (WB)               |

## Product Details

|                             |   |
|-----------------------------|---|
| Purpose:                    | Rabbit IgG polyclonal antibody for Tyrosine-protein kinase JAK1(JAK1) detection. Tested with WB in Human,Mouse,Rat.   |
| Immunogen:                  | A synthetic peptide corresponding to a sequence at the N-terminus of human JAK1 (78-115aa FALYDENTKLYWYAPNRTITVDDKMSLRLHYRMRFYFTN), different from the related mouse sequence by three amino acids. |
| Sequence:                   | FALYDENTKL WYAPNRTITV DDKMSLRLHY RMRFYFTN   |
| Isotype:                    | IgG   |
| Cross-Reactivity (Details): | No cross reactivity with other proteins.  |
| Characteristics:            | Rabbit IgG polyclonal antibody for Tyrosine-protein kinase JAK1(JAK1) detection. Tested with WB in Human,Mouse,Rat.<br>Gene Name: Janus kinase 1  |

## Product Details

---

Protein Name: Tyrosine-protein kinase JAK1

Purification: Immunogen affinity purified.

## Target Details

---

Target: JAK1

Alternative Name: JAK1 ([JAK1 Products](#))

Background: JAK1 (JANUS KINASE 1) is a human tyrosine kinase protein essential for signaling for certain type I and type II cytokines. It is a member of a new class of PTKs that are a large family of proteins characterized by the presence of a second phosphotransferase-related domain immediately N-terminal to the PTK domain--hence the name Janus. The JAK1 gene is mapped to 1p31.3. JAK1 is also important for transducing a signal by type I (IFN- $\alpha/\beta$ ) and type II (IFN- $\gamma$ ) interferons, and members of the IL-10 family via type II cytokine receptors. Additionally, Jak1 plays a critical role in initiating responses to multiple major cytokine receptor families. Loss of Jak1 is lethal in neonatal mice, possibly due to difficulties suckling. Expression of JAK1 in cancer cells enables individual cells to contract, potentially allowing them to escape their tumor and metastasize to other parts of the body.

Synonyms: JAK 1A | JAK-1 | JAK1A | JAK1B | Tyrosineprotein kinase JAK1 | Tyrosine-protein kinase JAK1 | P23458

Gene ID: 3716

UniProt: [P23458](#)

Pathways: [JAK-STAT Signaling](#), [RTK Signaling](#), [Interferon-gamma Pathway](#), [Hepatitis C](#), [Toll-Like Receptors Cascades](#), [Unfolded Protein Response](#)

## Application Details

---

Application Notes: WB: Concentration: 0.1-0.5  $\mu\text{g/mL}$ , Tested Species: Human, Mouse, Rat  
Notes: Tested Species: Species with positive results.  
Other applications have not been tested. Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

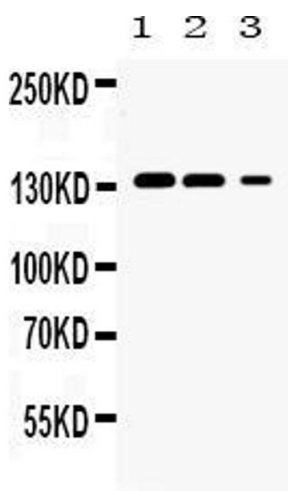
## Handling

|                    |   |
|--------------------|---|
| Format:            | Lyophilized   |
| Reconstitution:    | Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.  |
| Concentration:     | 500 µg/mL   |
| Buffer:            | Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Sodium azide.   |
| Preservative:      | Sodium azide  |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.  |
| Storage:           | 4 °C, -20 °C  |
| Storage Comment:   | At -20°C for one year. After reconstitution, at 4°C for one month.<br>It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing. |

## Publications

|                   |   |
|-------------------|---|
| Product cited in: | Liu, Li, Liang, Li, Jiang, Chu, Yang: "Hydrogen sulfide attenuates myocardial fibrosis in diabetic rats through the JAK/STAT signaling pathway." in: <b>International journal of molecular medicine</b> , Vol. 41, Issue 4, pp. 1867-1876, (2018) ( <a href="#">PubMed</a> ). |
|-------------------|---|

## Images



### Western Blotting

**Image 1.** Western blot analysis of JAK1 expression in rat kidney extract ( Lane 1), mouse kidney extract ( Lane 2) and HELA whole cell lysates ( Lane 3). JAK1 at 133KD was detected using rabbit anti- JAK1 Antigen Affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).