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Tel: 858.875.1900 Fax: 858.875.1999

Anti-JAK1 Picoband Antibody

Catalog # ABO10058

Specification

Anti-JAK1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P23458
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Tyrosine-protein kinase JAK1(JAK1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-JAK1 Picoband Antibody - Additional Information

Gene ID 3716

Other Names
Tyrosine-protein kinase JAK1, 2.7.10.2, Janus kinase 1, JAK-1, JAK1, JAK1A, JAK1B

Calculated MW
133277 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Endomembrane system; Peripheral membrane protein. Wholly intracellular, possibly membrane associated.

Tissue Specificity
Expressed at higher levels in primary colon tumors than in normal colon tissue. The expression level in metastatic colon tumors is comparable to the expression level in normal colon tissue. .

Protein Name
Tyrosine-protein kinase JAK1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human JAK1 (78-115aa FALYDENTKLWYAPNRTITVDDKMSLRLHYRMRFYFTN), different from the related mouse sequence by three amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-JAK1 Picoband Antibody - Protein Information

Name JAK1

Synonyms JAK1A, JAK1B

Function
Tyrosine kinase of the non-receptor type, involved in the IFN-alpha/beta/gamma signal pathway (PubMed:16239216, PubMed:28111307, PubMed:32750333, PubMed:7615558, PubMed:8232552). Kinase partner for the interleukin (IL)-2 receptor (PubMed:11909529) as well as interleukin (IL)-10 receptor (PubMed:12133952). Kinase partner for the type I interferon receptor IFNAR2 (PubMed:16239216, PubMed:28111307, PubMed:32750333, PubMed:7615558, PubMed:8232552). In response to interferon-binding to IFNAR1-IFNAR2 heterodimer, phosphorylates and activates its binding partner IFNAR2, creating docking sites for STAT proteins (PubMed:7759950). Directly phosphorylates STAT proteins but also activates STAT signaling through the transactivation of other JAK kinases associated with signaling receptors (PubMed:16239216, PubMed:32750333, PubMed:8232552).

Cellular Location
Endomembrane system; Peripheral membrane protein. Note=Wholly intracellular, possibly membrane associated

Tissue Location
Expressed at higher levels in primary colon tumors than in normal colon tissue. The expression level in metastatic colon tumors is comparable to the expression level in normal colon tissue

Anti-JAK1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

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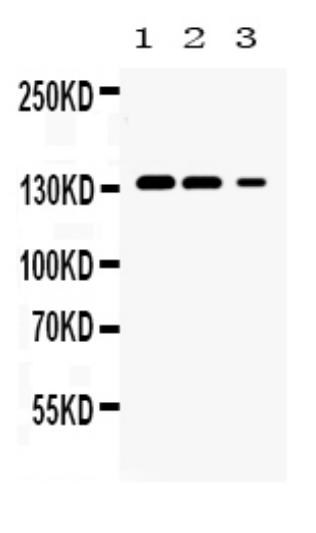
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-JAK1 Picoband Antibody - Images



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 #ABO10058) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-JAK1 Picoband Antibody - 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-Î±/Î²) and type II (IFN-Î³) 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.