DESCRIPTION

Species Reactivity: Mouse/Rat
Specificity: Detects mouse and rat Jak1 in Western blots.
Source: Polyclonal Goat IgG
Purification: Antigen Affinity-purified
Immunogen: E. coli-derived recombinant mouse Jak1
Ala14-Tyr55 (predicted)
Accession # P52332
Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
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<tr>
<td>Immunocytochemistry</td>
<td>5-15 μg/mL</td>
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DATA

Western Blot
Detection of Mouse/Rat Jak1 by Western Blot. Western blot shows lysates of Rat-2 rat embryonic fibroblast cell line, Y3-Ag rat myeloid cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 1 μg/mL of Goat Anti-Mouse/Rat Jak1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF602) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for Jak1 at approximately 130 kDa (as indicated). This experiment was conducted under reducing conditions and using Immoblot Buffer Group 1.

Immunocytochemistry
Jak1 in Mouse Splenocytes. Jak1 was detected in immersion fixed mouse splenocytes using Goat Anti-Mouse/Rat Jak1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF602) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

PREPARATION AND STORAGE

Reconstitution: Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
• 12 months from date of receipt, -20 to -70 °C as supplied.
• 1 month, 2 to 8 °C under sterile conditions after reconstitution.
• 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Janus Kinase 1 (Jak1) belongs to a family of protein tyrosine kinases that couple to cytokine receptors and are activated by ligand binding to these receptors. Activation of Jak1 occurs via phosphorylation at two adjacent tyrosine residues, Y1022 and Y1023, within the kinase domain. Jaks activate members of the STAT family of transcription factors by phosphorylating critical tyrosine regulatory sites. Jak1 is required for the activation of STAT1 and STAT2 in response to interferon α.

PRODUCT SPECIFIC NOTICES

This product is sold under license from Millipore Corporation under the following US or foreign patents: 5,821,069; 5,658,791; EP0560890. This product shall not be used to commercially screen drug molecules being developed as JAK1 or JAK2 inhibitors. Any such activity will be outside the scope of the research use only label license.