

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse Jak1 in Western blots
Source	Monoclonal Mouse IgG _{2A} Clone # 452804
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Jak1 Pro32-Phe286 Accession # P23458
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

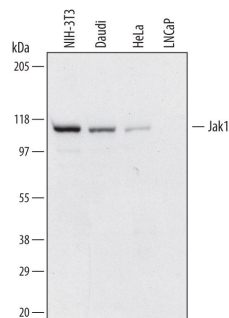
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	Lysates of Daudi human Burkitt's lymphoma cell line.

DATA

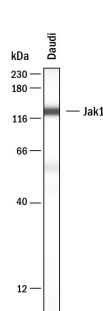
Western Blot



Detection of Human and Mouse Jak1 by Western Blot.

Western blot shows lysates of NIH-3T3 mouse embryonic fibroblast cell line, Daudi human Burkitt's lymphoma cell line, HeLa human cervical epithelial carcinoma cell line, and LNCaP human prostate cancer cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human/Mouse Jak1 Monoclonal Antibody (Catalog # MAB42601) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Jak1 at approximately 110-120 kDa (as indicated). This experiment was conducted under reducing conditions and using Immoblot Buffer Group 1.

Simple Western



Detection of Human/Mouse Jak1 by Simple Western™

Simple Western lane view shows lysates of Daudi human Burkitt's lymphoma cell line, loaded at 0.2 mg/mL. A specific band was detected for Jak1 at approximately 139 kDa (as indicated) using 10 µg/mL of Mouse Anti-Human/Mouse Jak1 Monoclonal Antibody (Catalog # MAB42601). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 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 IFN-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.