Human ICAM-1/CD54 Antibody

Polyclonal Goat Serum

Catalog Number: BBA17

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ICAM-1/CD54 in direct ELISAs and Western blots. ICAM-1/CD54 has been screened using CHO cells transfected with cDNAs for ICAM-1, VCAM-1, and E-Selectin. ICAM-1/CD54 was shown to be only reactive with ICAM-1.
Source	Polyclonal Goat Serum
Purification	N/A
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ICAM-1/CD54 Extracellular domain
Formulation	Lyophilized from a 0.2 μm filtered solution in Serum. See Certificate of Analysis for details.

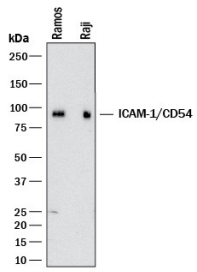
APPLICATIONS

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.*

	Recommended Concentration	Sample
Western Blot	1:1000 dilution	Ramos human Burkitt's lymphoma cell line and Raji human Burkitt's lymphoma cell line
Immunocytochemistry	1-25 µg/mL	See Below
Immunohistochemistry	1:300 dilution	Immersion fixed paraffin-embedded sections of human kidney
Knockout Validated	ICAM-1/CD54 is specifically detected in the parental Ramos human Burkitt's lymphoma cell line but is not detectable in knockout Ramos human Burkitt's lymphoma cell line.	

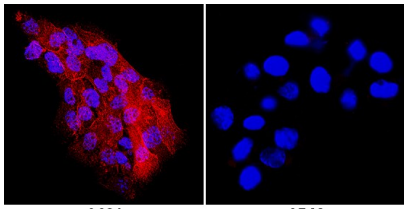
DATA

Western Blot



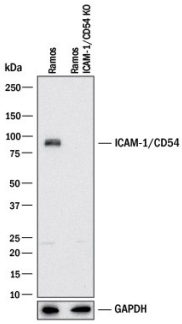
Detection of Human ICAM-1/CD54 by Western Blot. Western blot shows lysates of Ramos human Burkitt's lymphoma cell line and Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 1:1000 µg/mL of Goat Anti-Human ICAM-1/CD54 Polyclonal Antibody (Catalog # BBA17) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for ICAM-1/CD54 at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

Immunocytochemistry



ICAM-1/CD54 in A431 Human Cell Line. ICAM-1/CD54 was detected in immersion fixed A431 human epithelial carcinoma cell line using Goat Anti-Human ICAM-1/CD54 Polyclonal Antibody (Catalog # BBA17) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to plasma membrane. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Knockout Validated



Western Blot Shows Human ICAM-1/CD54 Specificity by Using Knockout Cell Line. Western blot shows lysates of Ramos human Burkitt's lymphoma cell line and human ICAM-1/CD54 Ramos human Burkitt's lymphoma cell line (KO). PVDF membrane was probed with 1:1000 µg/mL of Goat Anti-Human ICAM-1/CD54 Polyclonal Antibody (Catalog # BBA17) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for ICAM-1/CD54 at approximately 90 kDa (as indicated) in the parental Ramos human Burkitt's lymphoma cell line, but is not detectable in knockout Ramos human Burkitt's lymphoma cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human ICAM-1/CD54 Antibody

Polyclonal Goat Serum

Catalog Number: BBA17

PREPARATION AND STORAGE

Reconstitution	Reconstitute in 0.5 mL of sterile water.
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

Intercellular Adhesion Molecule-1 (ICAM-1, CD54) binds the leukocyte integrins LFA-1 and Mac-1. ICAM-1 expression is weak on leukocytes, epithelial and resting endothelial cells, as well as some other cell types, but expression can be stimulated by IFN-γ, TNF-α, IL-1β and LPS.

Soluble ICAM-1 is found in a biologically active form in serum, probably as a result of proteolytic cleavage from the cell surface, and is elevated in patients with various inflammatory syndromes such as septic shock, LAD, cancer and transplantation.

References:

1. Pigott, R. and C. Power, 1993, *The Adhesion Molecule Facts Book*, pp. 74. Academic Press.

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449