Technical Data Sheet

InVivoMAb anti-mouse CD54 (ICAM-1)

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

Lot Specific Information

Lot Number: **Lot Specific***
Volume: **Lot Specific***
Concentration: **Lot Specific* (generally 4 to 11 mg/ml) ***
Total Protein: **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	**BE0020-1**
Clone:	**YN1/1.7.4**
Isotype:	Rat IgG2b, κ
Recommended Isotype Control(s):	InVivoMAb rat IgG2b isotype control, anti-keyhole limpet hemocyanin
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	NS-1 mouse myeloma cells
Reported Applications:	*in vivo* ICAM-1 neutralization Immunohistochemistry (frozen) ELISA
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤1EU/mg (≤0.001EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	AB_1107661
Molecular Weight:	150 kDa

Description

The YN1/1.7.4 monoclonal antibody reacts with mouse CD54 also known as Intercellular Adhesion Molecule-1 (ICAM-1). CD54 is a 90 kDa single-chain transmembrane glycoprotein and a member of the Ig superfamily. CD54 is typically expressed on non-hematopoietic cells such as endothelial cells, thymic epithelial cells, and fibroblasts but can also be expressed on macrophages, T-lymphoblasts, germinal center B cells and dendritic cells. CD54 is a ligand for LFA-1, a receptor found on leukocytes. When activated, leukocytes bind to endothelial cells via CD54/LFA-1 to facilitate transmigration into tissues. Pro-inflammatory cytokines such as IL-1, TNF and IFNγ induce CD54 expression on endothelial cells and fibroblasts. The YN1/1.7.4 antibody has been shown to neutralize CD54 in vivo and inhibit CXCL1, IFNγ, and IL-17 production and neutrophil infiltration into inflammatory lesions.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0020-1?bxcs=9k1b3a#tab_references or scan the QR code below.

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