

# 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: <2EU/mg (<0.002EU/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](https://rrid.org/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?bxc=9k1b3a#tab\\_references](https://bioxcell.com/be0020-1?bxc=9k1b3a#tab_references) or scan the QR code below.



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