

Technical Data Sheet

Purified NA/LE Hamster Anti-Mouse CD51

Product Information

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|-------------------------|---|
| Material Number: | 553241 |
| Alternate Name: | Integrin α v chain |
| Size: | 0.5 mg |
| Concentration: | 1.0 mg/ml |
| Clone: | H9.2B8 |
| Immunogen: | Mouse C3H/HeN dendritic epidermal T cell line Y93A Cell Line |
| Isotype: | Armenian Hamster IgG3, λ 3 |
| Reactivity: | QC Testing: Mouse |
| Storage Buffer: | No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 μ m sterile filtered. Endotoxin level is ≤ 0.01 EU/ μ g (≤ 0.001 ng/ μ g) of protein as determined by the LAL assay. |

Description

The H9.2B8 antibody reacts with the 140-kDa integrin α v chain (CD51). Heterodimers of CD51 with several integrin β chains function as receptors for extracellular matrix (ECM) proteins. CD51/CD61 (α v β 3 integrin, vitronectin receptor) mediates adhesion to fibronectin, fibrinogen, vitronectin, thrombospondin, von Willebrand factor, and CD31 (PECAM-1). It is expressed on activated T lymphocytes, polymorphonuclear granulocytes, blastocysts, and osteoclasts. We have been unable to detect CD51 on mouse platelets using either mAb H9.2B8 or RMV-7. CD51 also forms heterodimers with integrin β 1 (CD29) and β 5, β 6, and α 8 chains. α v integrins have diverse functions in development and homeostasis. H9.2B8 antibody binds to an epitope of CD51 near or at the receptor-ligand binding site(s), as evidenced by its ability to synergistically participate in blocking of the adherence of vitronectin receptor-bearing cells to ECM proteins. This hamster mAb to a mouse leukocyte antigen does not cross-react with rat leukocytes.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

Application Notes

Application

| | |
|---------------------|------------------|
| Flow cytometry | Routinely Tested |
| Blocking | Reported |
| Immunoprecipitation | Reported |

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|---|--------|--------|
| 554056 | PE Mouse Anti-Armenian and Syrian Hamster IgG Cocktail | 0.2 mg | (none) |
| 552299 | Purified NA/LE Rat Anti-Mouse CD51 | 0.5 mg | RMV-7 |
| 553976 | Purified NA/LE Hamster IgG3 λ 1 Isotype Control | 0.5 mg | A19-4 |

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Moulder K, Roberts K, Shevach EM, Coligan JE. The mouse vitronectin receptor is a T cell activation antigen. *J Exp Med*. 1991; 173(2):343-347. (Clone-specific: Blocking, Immunoprecipitation)

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