# **Technical Data Sheet**

# Purified Rat Anti-Mouse PNAd Carbohydrate Epitope

### **Product Information**

 Material Number:
 553863

 Alternate Name:
 CD62L Ligand

 Size:
 0.5 mg

 Concentration:
 0.5 mg/ml

 Clone:
 MECA-79

Immunogen: Collagenase-dispersed BALB/c lymph node stroma

 $\begin{array}{ll} \textbf{Isotype:} & \text{Rat (WF) IgM, } \kappa \\ \textbf{Reactivity:} & \text{QC Testing: Mouse} \end{array}$ 

**Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

### Description

The MECA-79 antibody reacts with sulfate-dependent carbohydrate epitopes of peripheral lymph node addressin (PNAd). The MECA-79-reactive antigen is closely associated with the carbohydrate ligands for L-selectin (eg, CD34, GlyCAM-1, MAdCAM-1), which are expressed on high endothelial venules (HEV) in lymphoid tissues and at sites of chronic inflammation. Cross-reactivity with human, sheep, cow, primate, and pig tissues has been observed. MECA-79 antibody inhibits L-selectin-dependent lymphocyte and platelet homing to lymph nodes in vivo, and in vitro adhesion to lymphoid tissue HEV and immobilized PNAd.

### **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

### **Application Notes**

#### Application

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Immunohistochemistry-paraffin	Routinely Tested
Immunohistochemistry-frozen	Reported
Immunoprecipitation	Reported
Western blot	Reported
Blocking	Reported
Immunohistochemistry-zinc-fixed	Reported

### **Recommended Assay Procedure:**

This antibody has been tested by immunohistochemical staining (IHC) of citrate-pretreated formalin-fixed paraffin-embedded sections (5 - 20 µg/ml) to assure specificity and reactivity. Other reported applications include IHC of acetone-fixed frozen sections, immunoprecipitation, western blot analysis, and *in vitro* and *in vitro* adhesion blocking.

# **Suggested Companion Products**

Catalog Number	Name	Size	Clone	
553940	Purified Rat IgM, κ Isotype Control	0.5 mg	R4-22	
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal	

## **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.

### References

Berg EL, Robinson MK, Warnock RA, Butcher EC. The human peripheral lymph node vascular addressin is a ligand for LECAM-1, the peripheral lymph node homing receptor. *J Cell Biol.* 1991; 114(2):343-349. (Clone-specific: Blocking, Immunoprecipitation)

Binns RM, Whyte A, Licence ST. The role of E-selectin in lymphocyte and polymorphonuclear cell recruitment into cutaneous delayed hypersensitivity reactions in sensitized pigs. *J Immunol.* 1996; 157(9):4094-4099. (Biology)

Diacovo TG, Puri KD, Warnock RA, Springer TA, von Andrian UH. Platelet-mediated lymphocyte delivery to high endothelial venules. *Science*. 1996; 273(5272):252-255. (Clone-specific: Blocking)

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Hemmerich S, Butcher EC, Rosen SD. Sulfation-dependent recognition of high endothelial venules (HEV)-ligands by L-selectin and MECA 79, and adhesion-blocking monoclonal antibody. *J Exp Med.* 1994; 180(6):2219-2226. (Clone-specific: Immunoprecipitation)

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Michie SA, Streeter PR, Bolt PA, Butcher EC, Picker LJ. The human peripheral lymph node vascular addressin. An inducible endothelial antigen involved in lymphocyte homing. *Am J Pathol.* 1993; 143(6):1688-1698. (Clone-specific: Blocking)

Puri KD, Finger EB, Gaudernack G, Springer TA. Sialomucin CD34 is the major L-selectin ligand in human tonsil high endothelial venules. *J Cell Biol.* 1995; 131(1):261-270. (Clone-specific: Blocking, Western blot)

Streeter PR, Rouse BT, Butcher EC. Immunohistologic and functional characterization of a vascular addressin involved in lymphocyte homing into peripheral lymph nodes. *J Cell Biol.* 1988; 107(5):1853-1862. (Immunogen: Blocking, Immunohistochemistry)

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