Technical Data Sheet

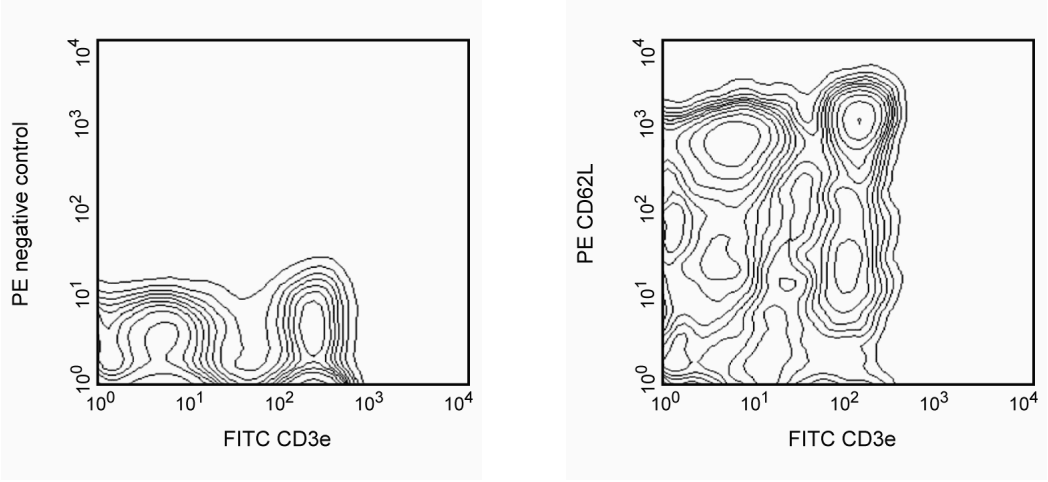
PE Rat Anti-Mouse CD62L

Product Information

Material Number:	**553151**
Alternate Name:	Sell; L-selectin; LECAM-1; LAM-1; Lnhr; Ly-22; Ly-m22; Lyam-1
Size:	0.2 mg
Concentration:	0.2 mg/ml
Clone:	MEL-14
Immunogen:	C3H/eb mouse B lymphoma 38C-13
Isotype:	Rat (F344) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The MEL-14 monoclonal antibody specifically binds to CD62L (L-selectin), a 95 kDa (on neutrophils) or 74 kDa (on lymphocytes) receptor with lectin-like and Epidermal Growth Factor-like domains. In the mouse, L-selectin is detected on most thymocytes, with the highest levels of expression on an immunocompetent subset and a population of dividing progenitor cells, and on peripheral leukocytes, including subsets of B and T lymphocytes, neutrophils, monocytes, and eosinophils. This member of the selectin adhesion molecule family appears to be required for lymphocyte homing to peripheral lymph nodes and to contribute to neutrophil emigration at inflammatory sites. L-selectin is rapidly shed from lymphocytes and neutrophils upon cellular activation; metalloproteinases may mediate the release of CD62L ectodomains from the cell surface. The level of CD62L expression, along with other markers, distinguishes naive, effector, and memory T cells. L-selectin binds to sialytaed oligosaccharide determinants on high endothelial venules (HEV) in peripheral lymph nodes. In vitro studies have demonstrated that CD34, GlyCAM-1, and MAdCAM-1, all recognized by mAb MECA-79 (anti-mouse PNAd Carbohydrate Epitope, Cat. No. 553863), may be ligands for CD62L. MEL-14 mAb blocks in vitro binding of lymphocytes to peripheral lymph node HEV and inhibits in vivo lymphocyte extravasation into peripheral lymph nodes and late stages of leukocyte rolling.



Two-color analysis of CD62L expression on spleen lymphocytes. *BALB/c splenocytes were simultaneously stained with PE Rat anti-Mouse CD62L (right panel) and FITC Hamster Anti-Mouse CD3e (Cat. No. 553061/553062, both panels) monoclonal antibodies. Flow cytometry was performed on a BD FACScan™ flow cytometry system.*

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Recommended Assay Procedure:

This antibody conjugate is compatible with intracellular staining protocols using the BD Cytofix/Cytoperm™ Kit (Cat. No. 554714).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553061	FITC Hamster Anti-Mouse CD3e	0.1 mg	145-2C11
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554656	Stain Buffer (FBS)	500 ml	(none)

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.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
4. 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.
5. An isotype control should be used at the same concentration as the antibody of interest.

References

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