

## Technical Data Sheet

## Purified NA/LE Rat Anti-Mouse CD162

## Product Information

Material Number:	557787
Alternate Name:	PSGL-1
Size:	0.5 mg
Concentration:	1.0 mg/ml
Clone:	4RA10
Immunogen:	PSGL-1 human IgG1 fusion protein
Isotype:	Rat (LEW) IgG1, $\kappa$
Reactivity:	QC Testing: Mouse
Storage Buffer:	No azide/low endotoxin: Aqueous buffered solution containing no preservative, 0.2 $\mu$ m sterile filtered. Endotoxin level is $\leq 0.01$ EU/ $\mu$ g ( $\leq 0.001$ ng/ $\mu$ g) of protein as determined by the LAL assay.

## Description

The 4RA10 antibody reacts with the N-terminal functional peptide of CD162 (P-selectin glycoprotein ligand-1, PSGL-1), encoded by the *Selp1* gene. PSGL-1 is expressed on the cell surface as a homodimer of approximately 230 kDa. In the mouse, *Selp1* mRNA is detected in most tissues, with high levels found in hematopoietic cells, brain, and adipose tissue. Flow cytometric analyses have revealed CD162 expression on bone marrow-derived mast and dendritic cells, splenic leukocytes, platelets, peripheral blood neutrophils, and neutrophil and T-cell lines. PSGL-1 is a ligand for P-selectin (CD62P) and is involved in leukocyte rolling, the migration of leukocytes into inflamed tissues, and responses to vascular injury. It is a sialomucin that must be specifically sialylated, fucosylated, and sulfated to bind P-selectin. There is also evidence that other ligands for PSGL-1 and CD62P may exist. 4RA10 mAb is reported to block the binding of mouse leukocytes to CD62P and CD62L.

## 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
Western blot	Reported

## Suggested Companion Products

Catalog Number	Name	Size	Clone
553921	Purified NA/LE Rat IgG1, $\kappa$ Isotype Control	0.5 mg	R3-34
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal

## Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.

## References

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Li F, Wilkins PP, Crawley S, Weinstein J, Cummings RD, McEver RP. Post-translational modifications of recombinant P-selectin glycoprotein ligand-1 required for binding to P- and E-selectin. *J Biol Chem*. 1996; 271(6):3255-3264. (Biology)

Pendl GG, Robert C, Steinert M, et al. Immature mouse dendritic cells enter inflamed tissue, a process that requires E- and P-selectin, but not P-selectin glycoprotein ligand 1. *Blood*. 2002; 99(3):946-956. (Immunogen: Blocking, Immunoprecipitation, Western blot)

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Phillips JW, Barringhaus KG, Sanders JM, et al. Single injection of P-selectin or P-selectin glycoprotein ligand-1 monoclonal antibody blocks neointima formation after arterial injury in apolipoprotein E-deficient mice. *Circulation*. 2003; 107(17):2244-2249. (Clone-specific: Blocking)

Sperandio M, Smith ML, Forlow SB, et al. P-selectin glycoprotein ligand-1 mediates L-selectin-dependent leukocyte rolling in venules. *J Exp Med*. 2003; 197(10):1355-1363. (Clone-specific: Blocking)

Steegmaier M, Blanks JE, Borges E, Vestweber D. P-selectin glycoprotein ligand-1 mediates rolling of mouse bone marrow-derived mast cells on P-selectin but not efficiently on E-selectin. *Eur J Immunol*. 1997; 27(6):1339-1345. (Biology)

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