

Datasheet: MCA6123PE

Description:	MOUSE ANTI HUMAN CD162:RPE
Specificity:	CD162
Other names:	PSGL-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	TC2
Isotype:	IgG1
Quantity:	100 TESTS/2ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
	RPE 561nm laser	546	578
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃) 0.2% Bovine Serum Albumin		
Immunogen	Human thymocytes		

**External Database
Links**

UniProt:

[Q14242](#) [Related reagents](#)

Entrez Gene:

[6404](#) SELPLG [Related reagents](#)

Specificity

Mouse anti Human CD162 clone TC2, recognizes CD162 also known as P-Selectin glycoprotein ligand-1 (PSGL-1). It is a 120 kDa transmembrane protein that primarily exists as a homodimer on hematopoietic cells including myeloid, lymphoid, dendritic cells and some non-hematopoietic cells ([Laszik et al. 1996](#)).

The most well know function of CD162, when activated, is its role in inflammation in that it slows down leucocytes on the surface of activated epithelium. This occurs when one of its ligands, P-, E- or L- selectin on activated platelets or activated endothelial cells bind to its N-terminal extracellular domain. Upon P-selectin binding, a very long molecule is essentially formed which extends from the activated endothelial cells and leukocyte surface layer, These can also effectively capture circulating myeloid cells. Before a ligand can bind to CD162, the receptor must be postrationally modified with sialylated, fucosylated O-glycans as well as sulfation at the N-terminal tyrosines ([Kappelmayer & Nagy 2017](#)). Mutations which interrupt these post translational modifications prevent ligand binding and has been shown to result in patients suffering from infections of the mucosal membrane and skin ([Maly et al. 1996](#)).

The TC2 clone has been used in flow cytometry experiments to examine the effects on CD162 expression levels on the surface of neutrophils upon treatment with histidine-rich glycoprotein which can regulate immunothrombosis and inflammation ([Wake et al. 2016](#)).

Purity

>95% by SDS PAGE

Flow Cytometry

Use 20ul of the undiluted reagent to label 1×10^6 cells in 100ul

Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

To

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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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