

Datasheet: MCA796PE

Description:	MOUSE ANTI HUMAN CD62P:RPE
Specificity:	CD62P
Other names:	P-SELECTIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	AK-6
Isotype:	IgG1
Quantity:	100 TESTS

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 antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Rhesus Monkey

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin 5% Sucrose
Immunogen	Human platelet membrane glycoproteins.
External Database Links	<p>UniProt: P16109 Related reagents</p> <p>Entrez Gene: 6403 SELP Related reagents</p>
Synonyms	GMRP, GRMP
RRID	AB_1125276
Specificity	<p>Mouse anti Human CD62P antibody, clone AK-6 recognizes the CD62P, also known as P-selectin, Granule membrane protein 140, GMP140, Leukocyte-endothelial cell adhesion molecule 3 or Platelet activation dependent granule-external membrane protein. CD62P is a 830 amino acid, including a 41 amino acid signal peptide, ~140 kDa single pass type I transmembrane glycoprotein expressed on activated platelets and endothelial cell</p> <p>CD62P plays an important role in adhesive processes between leucocytes and endothelial cells. CD62P is a component of the platelet alpha granule and is rapidly translocated to the plasma membrane upon activation (Stenberg <i>et al.</i> 1985).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Skinner, M.P. <i>et al.</i> (1989) Characterization of human platelet GMP-140 as a heparin-binding protein. Biochem Biophys Res Commun. 164 (3): 1373-9. 2. Skinner, M.P. <i>et al.</i> (1991) GMP-140 binding to neutrophils is inhibited by sulfated glycans. J Biol Chem. 266 (9): 5371-4. 3. Dunlop, L.C. <i>et al.</i> (1992) Characterization of GMP-140 (P-selectin) as a circulating plasma protein. J Exp Med. 175 (4): 1147-50. 4. Theoret, J.F. <i>et al.</i> (2001) P-selectin antagonism with recombinant p-selectin glycoprotein ligand-1 (rPSGL-Ig) inhibits circulating activated platelet binding to neutrophils induced by damaged arterial surfaces. J Pharmacol Exp Ther. 298: 658-64 5. Turner, C.P. <i>et al.</i> (2003) The role of P-selectin in the immune destruction of platelets. Br J Haematol. 121: 623-31. 6. Roos-Engstrand, E. <i>et al.</i> (2005) Increased expression of p38 MAPK in human bronchial epithelium after lipopolysaccharide exposure. Eur Respir J. 25 (5): 797-803. 7. Norling, L.V. <i>et al.</i> (2008) Inhibitory control of endothelial galectin-1 on in vitro and in vivo lymphocyte trafficking. FASEB J. 22: 682-90. 8. Dalli, J. <i>et al.</i> (2008) Annexin 1 mediates the rapid anti-inflammatory effects of neutrophil-derived microparticles. Blood. 112 (6): 2512-9.

9. Wassmer, S.C. *et al.* (2008) Platelet-induced clumping of Plasmodium falciparum-infected erythrocytes from Malawian patients with cerebral malaria-possible modulation in vivo by thrombocytopenia. [J Infect Dis. 197: 72-8.](#)
10. Kornerup, K.N. *et al.* (2010) Circulating platelet-neutrophil complexes are important for subsequent neutrophil activation and migration. [J Appl Physiol. 109: 758-67.](#)
11. van Nispen tot Pannerden, H. *et al.* (2010) The platelet interior revisited: electron tomography reveals tubular alpha-granule subtypes. [Blood. 116: 1147-56.](#)
12. Knipe, L. *et al.* (2010) A revised model for the secretion of tPA and cytokines from cultured endothelial cells. [Blood. 116 \(12\): 2183-91.](#)
13. Kitaya, K. & Yasuo, T. (2010) Aberrant expression of selectin E, CXCL1, and CXCL13 in chronic endometritis. [Mod Pathol. 23 \(8\): 1136-46.](#)
14. Christersson, C. *et al.* (2013) Evaluation of microparticles in whole blood by multicolour flow cytometry assay. [Scand J Clin Lab Invest. 73\(3\): 229-39.](#)
15. Xiong, G.M. *et al.* (2015) Imparting electroactivity to polycaprolactone fibers with heparin-doped polypyrrole: Modulation of hemocompatibility and inflammatory responses. [Acta Biomater. 23: 240-9.](#)
16. Liao, Y. *et al.* (2017) Tailoring of TiO₂ films by H₂SO₄ treatment and UV irradiation to improve anticoagulant ability and endothelial cell compatibility. [Colloids Surf B Biointerfaces. 155: 314-22.](#)
17. Cipok, M. *et al.* (2019) Pathogenic heparin-induced thrombocytopenia and thrombosis (HIT) antibodies determined by rapid functional flow cytometry. [Eur J Haematol. 103 \(3\): 225-233.](#)
18. Jiang, T. *et al.* (2019) Hyaluronic Acid Nanoparticle Composite Films Confer Favorable Time-Dependent Biofunctions for Vascular Wound Healing. [ACS Biomater Sci Eng. 5 \(4\): 1833-48.](#)
19. Tardy-Poncet, B. *et al.* (2021) Functional Flow Cytometric Assay for Reliable and Convenient Heparin-Induced Thrombocytopenia Diagnosis in Daily Practice [Biomedicines. 9 \(4\): 332.](#)

Further Reading	1. Bevilacqua, M.P. & Nelson, R.M. (1993) Selectins. J Clin Invest. 91 (2): 379-87.
Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA796PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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

'M419662:230616'

Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)