

### Datasheet: MCA796F

Description:	MOUSE ANTI HUMAN CD62P:FITC
Specificity:	CD62P
Other names:	P-SELECTIN
Format:	FITC
<b>Product Type:</b>	Monoclonal Antibody
Clone:	AK-6
Isotype:	lgG1
Quantity:	0.1 mg

## **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				*

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.

\* We recommend that this antibody be carefully titred against any previous batches to enable correct comparisons to be made with earlier results. The suggested working range lies between neat and 1/10.

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 conju	ugated to Fluorescein Isoth	niocyanate Isomer 1 (F	TTC) - liquid	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	FITC	490	525		

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
Immunogen	Human platelet membrane glycoproteins.
External Database Links	UniProt: P16109 Related reagents  Entrez Gene: 6403 SELP Related reagents
Synonyms	GMRP, GRMP
RRID	AB_1125275
Specificity	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
	cells. CD62P is a component of the platelet alpha granule and is rapidly translocated to the plasma membrane upon activation ( <u>Stenberg <i>et al.</i> 1985</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>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.</li> <li>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.</li> <li>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.</li> <li>Theoret, J.F. <i>et al.</i> (2001) P-selectin antagonism with recombinant p-selectin glycoprotein ligand-1 (rPSGL-lg) inhibits circulating activated platelet binding to neutrophils induced by damaged arterial surfaces. J Pharmacol Exp Ther. 298: 658-64</li> <li>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.</li> <li>Roos-Engstrand, E. <i>et al.</i> (2005) Increased expression of p38 MAPK in human</li> </ol>

- bronchial epithelium after lipopolysaccharide exposure. Eur Respir J. 25 (5): 797-803.
- 7. Norling, L.V. *et al.* (2008) Inhibitory control of endothelial galectin-1 on in vitro and in vivo lymphocyte trafficking. FASEB J. 22: 682-90.
- 8. Dalli, J. *et al.* (2008) Annexin 1 mediates the rapid anti-inflammatory effects of neutrophil-derived microparticles. <u>Blood. 112 (6): 2512-9.</u>
- 9. Wassmer, S.C. *at al.* (2008) Platelet-induced clumping of Plasmodium falciparum-infected erythrocytes from Malawian patients with cerebral malaria-possible modulation in vivo by thrombocytopenia. <u>J Infect Dis. 197: 72-8.</u>
- 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. <u>Blood. 116: 1147-56.</u>
- 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. <u>Scand J Clin Lab Invest.</u> 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 TiO<sub>2</sub> films by H<sub>2</sub>SO<sub>4</sub> treatment and UV irradiation to improve anticoagulant ability and endothelial cell compatibility. <u>Colloids Surf B</u> Biointerfaces. 155: 314-22.
- 17. Cipok, M. *et al.* (2019) Pathogenic heparin-induced thrombocytopenia and thrombosis (HIT) antibodies determined by rapid functional flow cytometry. <u>Eur J Haematol</u>. 103 (3): 225-233.
- 18. Jiang, T. *et al.* (2019) Hyaluronic Acid Nanoparticle Composite Films Confer Favorable Time-Dependent Biofunctions for Vascular Wound Healing. <u>ACS Biomater Sci Eng. 5 (4):</u> 1833-48.
- 19. Khandagale, A. *et al.* (2020) Role of Extracellular Vesicles in Pulmonary Arterial Hypertension: Modulation of Pulmonary Endothelial Function and Angiogenesis. <u>Arterioscler Thromb Vasc Biol. 40 (9): 2293-309.</u>
- 20. Tardy-Poncet, B. *et al.* (2021) Functional Flow Cytometric Assay for Reliable and Convenient Heparin-Induced Thrombocytopenia Diagnosis in Daily Practice <u>Biomedicines.</u> 9 (4): 332.
- 21. Åberg, M. *et al.* (2022) Platelet-leukocyte aggregate formation and inflammation in patients with pulmonary arterial hypertension and CTEPH. Platelets. 33 (8): 1199-207.
- 22. Sandström, T. *et al.* (2024) Acute airway inflammation following controlled biodiesel exhaust exposure in healthy subjects. <u>Part Fibre Toxicol. 21 (1): 53.</u>
- 23. Osete, J. *et al.* (2024) TRAP-Induced Platelet Reactivity Is Inhibited by Omega-3 Fatty Acid-Derived Prostaglandin E3 (PGE3) <u>Biomedicines. 12 (12): 2855.</u>

### **Further Reading**

1. Bevilacqua, M.P. & Nelson, R.M. (1993) Selectins. J Clin Invest. 91 (2): 379-87.

#### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. 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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA796F">https://www.bio-rad-antibodies.com/SDS/MCA796F</a>
Regulatory	For research purposes only

# **Related Products**

**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

**Recommended Useful Reagents** 

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M384637:210513'

### Printed on 06 Nov 2025

© 2025 Bio-Rad Laboratories Inc | Legal | Imprint