

Datasheet: MCA796A700

Description:	MOUSE ANTI HUMAN CD62P:Alexa Fluor® 700		
Specificity:	CD62P		
Other names:	P-SELECTIN		
Format:	ALEXA FLUOR® 700		
Product Type:	Monoclonal Antibody		
Clone:	AK-6		
Isotype:	lgG1		
Quantity:	100 TESTS/1ml		

## **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				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	Reacts with: Rhesu	us Monkey		
Reactivity	reactivity is derived	tivity and working conditi I from testing within our I cations from the originato	aboratories, peer-re	eviewed publications o
Product Form	Purified IgG conjug	gated to Alexa Fluor 700	- liquid	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nn	n)
	Alexa Fluor®700	702	723	
Preparation	Purified IgG prepar supernatant	ed by affinity chromatog	raphy on Protein A	from tissue culture

Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Human platelet membrane glycoproteins.
External Database Links	UniProt: P16109 Related reagents
	Entrez Gene:  6403 SELP Related reagents
Synonyms	GMRP, GRMP
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
	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 ( <u>Stenberg et al. 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 heparinbinding protein. <u>Biochem Biophys Res Commun. 164 (3): 1373-9.</u></li> <li>Skinner, M.P. <i>et al.</i> (1991) GMP-140 binding to neutrophils is inhibited by sulfated glycans. <u>J Biol Chem. 266 (9): 5371-4.</u></li> </ol>

- 3. Dunlop, L.C. et al. (1992) Characterization of GMP-140 (P-selectin) as a circulating plasma protein. J Exp Med. 175 (4): 1147-50.
- 4. Theoret, J.F. et al. (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. et al. (2003) The role of P-selectin in the immune destruction of platelets. Br J Haematol. 121: 623-31.
- 6. Roos-Engstrand, E. et al. (2005) Increased expression of p38 MAPK in human 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. Blood. 112 (6): 2512-9.
- 9. Wassmer, S.C. at al. (2008) Platelet-induced clumping of Plasmodium falciparuminfected 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. <u>Blood</u>. 116: 1147-56.
- 12. Knipe, L. *et al.* (2010) A revised model for the secretion of tPA and cytokines from cultured endothelial cells. <u>Blood. 116 (12): 2183-91.</u>
- 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 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. 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.

## **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

#### Acknowledgements

This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad

CA 92008 USA or outlicensing@thermofisher.com

**Health And Safety** Material Safety Datasheet documentation #10041 available at:

Information

https://www.bio-rad-antibodies.com/SDS/MCA796A700

10041

Regulatory For research purposes only

# Related Products

# **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 700 (MCA928A700)

## **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

North & South Tel: +1 800 265 7376 Worldwide Tel: +44 (0)1865 852 700 Europe Tel: +49 (0) 89 8090 95 21 America Fax: +1 919 878 3751 Fax: +44 (0)1865 852 739 Fax: +49 (0) 89 8090 95 50

> Email: antibody\_sales\_us@bio-rad.com Email: antibody\_sales\_uk@bio-rad.com 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 'M384815:210513'

## Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | Legal | Imprint