Datasheet: MCA796A647

Description:	MOUSE ANTI HUMAN CD62P:Alexa Fluor® 647
Specificity:	CD62P
Other names:	P-SELECTIN
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	AK-6
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

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 Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

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 0.05 mg/ml
Immunogen	Human platelet membrane glycoproteins.
External Database Links	**UniProt:** P16109 Related reagents **Entrez Gene:** 6403 SELP Related reagents
Synonyms	GMRP, GRMP
RRID	AB_1125278
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 (Stenberg *et al.* 1985).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Skinner, M.P. *et al.* (1989) Characterization of human platelet GMP-140 as a heparin-binding protein. Biochem Biophys Res Commun. 164 (3): 1373-9. 2. Skinner, M.P. *et al.* (1991) GMP-140 binding to neutrophils is inhibited by sulfated glycans. J Biol Chem. 266 (9): 5371-4. 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.

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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. Khandagale, A. *et al.* (2020) Role of Extracellular Vesicles in Pulmonary Arterial Hypertension: Modulation of Pulmonary Endothelial Function and Angiogenesis. Arterioscler Thromb Vasc Biol. 40 (9): 2293-309.
20. 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.
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.
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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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA796A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America Tel: +1 800 265 7376 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

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