

CD62P (P-Selectin) Monoclonal Antibody (AK-4), eBioscience™

Product Details

Size	100 µg
Species Reactivity	Human
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	AK-4
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467318

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	5 µg/ml	-
Flow Cytometry (Flow)	1 µg/test	1 Publication
ELISA (ELISA)	-	1 Publication
Neutralization (Neu)	Assay-Dependent	-
Functional Assay (FN)	Assay-Dependent	-

Product Specific Information

Description: The AK-4 monoclonal antibody reacts with human CD62P, a 140 kDa transmembrane glycoprotein also known as P-Selectin. Upon activation, CD62P is rapidly transported from its cytoplasmic stores in the Weibel-Palade bodies of endothelial cells or the alpha-granules of platelets to the surface. CD62P initiates the adhesive interaction between endothelial cells and neutrophils and monocytes during the inflammatory reaction and is also involved in the interaction of platelets with monocytes and neutrophils.

Applications Reported: The AK-4 antibody has been reported for use in flow cytometric analysis, and immunohistochemical staining of frozen tissue sections. AK-4 has also been reported in blocking adhesion of platelets in in vitro assays.

Applications Tested: This AK-4 antibody has been tested by flow cytometric analysis of resting and thrombin-activated human platelets. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

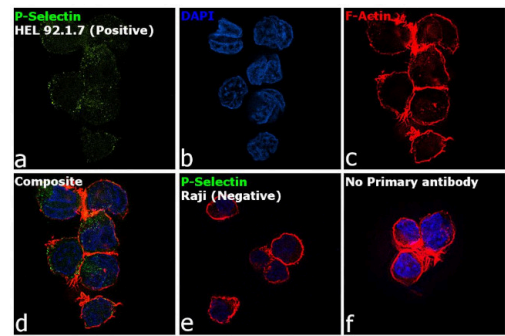
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD62P (P-Selectin) Monoclonal Antibody (AK-4), eBioscience™

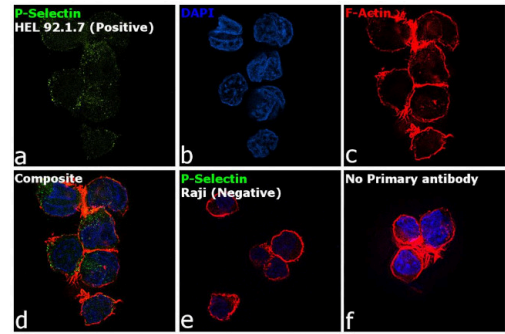
CD62P (P-Selectin) Antibody (14-0628-82) in ICC/IF

Immunofluorescence analysis of P-Selectin was performed using HEL 92.1.7 and Raji cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with P-selectin Mouse Monoclonal Antibody (Product # 14-0628-80) at 5 µg/mL in 0.1% BSA and incubated overnight at 4 degree and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, Alexa Fluor® 488 (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the composite image showing membrane localization of P-Selectin in HEL 92.1.7 but not in Raji (Panel e). Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification..



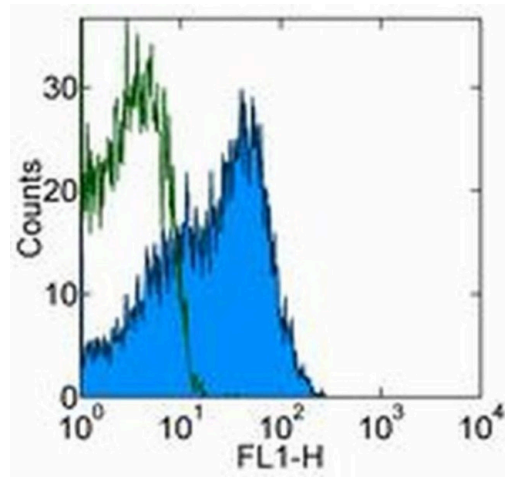
CD62P (P-Selectin) Antibody (14-0628-82)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cells lines tested owing to their inherent genetic constitution. Relative expression of P-Selectin in HEL 92.1.7 as compared to Raji which is reported to be low to negative for P-Selectin expression using Anti-P-Selectin Monoclonal Antibody (Product # 14-0628-80) in Immunofluorescence analysis. {RE}



CD62P (P-Selectin) Antibody (14-0628-82) in Flow

Staining of thrombin-activated human peripheral blood platelets with 0.5 µg of Mouse IgG1 kappa Isotype Control Purified (Product # 14-4714-82) (open histogram) or 0.5 µg of Anti-Human CD62P (P-Selectin) Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Total viable cells were used for analysis.



Flow Cytometry (1)

Biophysical journal	Year 2008
Monitoring receptor-ligand interactions between surfaces by thermal fluctuations.	Species Human
"14-0628 was used in Flow cytometry/Cell sorting to develop and validate a method for monitoring 2D receptor-ligand interactions based on thermal fluctuations of a biomembrane force probe."	
Authors: Chen W,Evans EA,McEver RP,Zhu C	

ELISA (1)

Scientific reports	Year 2016
Soluble Siglec-5 associates to PSGL-1 and displays anti-inflammatory activity.	Species Mouse
"14-0628 was used in an ELISA assay to identify PSGL1 as a ligand for Siglec-5, and soluble Siglec-5 variants appear efficient in blocking PSGL1-mediated leukocyte rolling and the inflammatory response in general."	
Authors: Pepin M,Mezouar S,Pegon J,Muczynski V,Adam F,Bianchini EP,Bazaa A,Proulle V,Rupin A,Paysant J,Panicot-Dubois L,Christophe OD,Dubois C,Lenting PJ,Denis CV	

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