abcam

ab118522

Anti-P-Selectin (CD62P) antibody [Psel.KO.2.5]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing SELP protein. The exact immunogen used to generate this antibody is proprietary information. Database link P16109
Clone number	Psel.KO.2.5
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	10 µg/mL
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Flow Cyt

Tested

Species	Human
Dilution info	1/1 - 1/50
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information SELP

Function	Ca(2+)-dependent receptor for myeloid cells that binds to carbohydrates on neutrophils and monocytes. Mediates the interaction of activated endothelial cells or platelets with leukocytes. The ligand recognized is sialyl-Lewis X. Mediates rapid rolling of leukocyte rolling over vascular surfaces during the initial steps in inflammation through interaction with SELPLG. Mediates cell-cell interactions and cell adhesion via the interaction with integrin alpha-IIb/beta3 (ITGA2B:ITGB3) and integrin alpha-V/beta-3 (ITGAV:ITGB3) (PubMed:37184585).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD62P also known as P-selectin is a cell adhesion molecule expressed on the surface of activated endothelial cells and platelets. It is a type of protein with a known molecular weight of approximately 140 kDa. P-selectin plays a mechanical role in mediating leukocyte rolling on the endothelium which is an initial step in the inflammatory response. This protein is rapidly translocated to the plasma membrane upon platelet activation and is stored in alpha granules of platelets and Weibel-Palade bodies of endothelial cells.

Biological function summary	P-selectin is critical in the recruitment of leukocytes to sites of tissue injury and infection. It facilitates the adhesion of leukocytes to the vascular endothelium by binding to its ligand PSGL-1 on the leukocyte surface. This interaction supports the transition of leukocytes from the circulation to the site of inflammation. P-selectin is also involved in thrombus formation as it contributes to the interactions between platelets leukocytes and endothelium in the vascular wall. It acts as part of a dynamic complex in the regulation of the innate immune response and hemostasis.
Pathways	CD62P plays an important role in both the inflammatory and coagulation pathways. It is an important mediator in the leukocyte adhesion cascade influencing leukocyte tethering and rolling on activated endothelium. The interaction of P-selectin with PSGL-1 initiates the signaling pathways that lead to firm adhesion and extravasation of leukocytes. In the coagulation pathway P-selectin enhances interactions between platelets and leukocytes which support thrombus formation. Its regulation and activity are tightly linked with other proteins such as E-selectin and L-selectin in coordinating vascular and systemic inflammatory responses.
Associated diseases and disorders	Altered expression of CD62P is associated with various inflammatory conditions and cardiovascular diseases. In thrombosis increased levels of P-selectin enhance platelet aggregation and stability of the thrombus contributing to pathological clot formation. Similarly in atherosclerosis P-selectin facilitates the recruitment of monocytes to the vessel wall promoting plaque development. The protein's function relates to interactions with key inflammatory mediators and its dysregulation is often observed in conditions like chronic inflammatory diseases and acute myocardial infarction.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

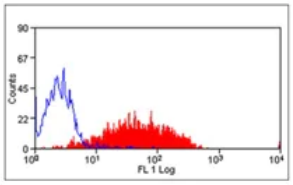
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

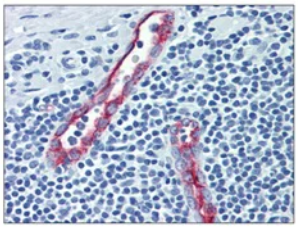
3 product images



Flow Cytometry - Anti-P-Selectin (CD62P) antibody [Psel.KO.2.5] (ab118522)

P-Selectin (CD62P) Flow Cytometry staining using mouse Anti-P-Selectin (CD62P) antibody

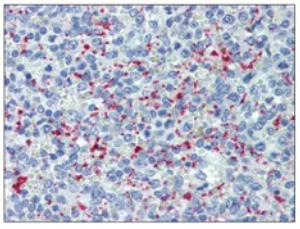
ab118522 at 10µl/10^6 cells in 100µl staining CD62P in Thrombin activated Human platelets by Flow cytometry.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P-Selectin (CD62P) antibody [Psel.KO.2.5] (ab118522)

P-Selectin (CD62P) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-P-Selectin (CD62P) antibody

Immunohistochemical analysis of CD62P expression in Formalin-Fixed, Paraffin-Embedded Human Tonsil using 10 µg/ml ab118522 followed by biotinylated secondary antibody, alkaline phosphatase-streptavidin and chromogen.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P-Selectin (CD62P) antibody [Psel.KO.2.5] (ab118522)

P-Selectin (CD62P) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-P-Selectin (CD62P) antibody

Immunohistochemical analysis of CD62P expression in Formalin-Fixed, Paraffin-Embedded Human Spleen using 10 µg/ml ab118522 followed by biotinylated secondary antibody, alkaline phosphatase-streptavidin and chromogen.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.