abcam

ab259996

Anti-CD62P antibody [EPR22850-206] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR22850-206
Purification technique	Affinity purification Protein A

Reactivity data

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

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	+4°C
Storage information	Do Not Freeze

Notes

ab259996 is the carrier-free version of ab255821.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

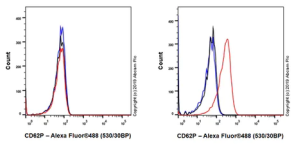
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-CD62P antibody [EPR22850-206] - BSA and Azide free (ab259996)

CD62P Flow Cytometry staining using rabbit Anti-CD62P antibody

Flow cytometric analysis of HEK-293 (human embryonic kidney epithelial cell, Left) / HEL (human Erythroleukemia erythroblast, Right) cells labelling CD62P with ab255821 at 1/50 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.
Negative control: HEK-293 (PMID: 7693674).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab255821).

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