abcam

ab177940

Anti-ADAMTS13 antibody [EPR6132]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR6132
Purification technique	Affinity purification Protein A
Concentration	2.141 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Mouse
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Rat
Dilution info	-
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information ADAMTS13

Function	Cleaves the vWF multimers in plasma into smaller forms thereby controlling vWF-mediated platelet thrombus formation.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
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

Notes

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.

Supplementary info

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

Activity summary	ADAMTS13 also known as von Willebrand factor-cleaving protease (VWFCP) is a zinc-containing metalloprotease with a molecular mass of approximately 190 kDa. This protein belongs to the ADAMTS (a disintegrin and metalloproteinase with thrombospondin motifs) family and exhibits a complex structure with specific domains including a metalloprotease and a disintegrin-like domain. ADAMTS13 is produced mainly in the liver and circulates in the blood plasma. Research shows that it primarily facilitates the cleavage of von Willebrand factor (vWF) a large multimeric protein essential for blood clotting.
Biological function summary	ADAMTS13 plays a role in regulating the size and function of von Willebrand factor (vWF) ensuring proper hemostatic balance. The enzyme prevents the accumulation of ultra-large vWF multimers which can lead to spontaneous platelet aggregation and thrombus formation. Although ADAMTS13 acts independently its function is closely linked to the dynamics of vWF in response to vascular injury. Properly functioning ADAMTS13 aids in maintaining normal blood flow by preventing unnecessary clot formation in the bloodstream.
Pathways	ADAMTS13 is critical in the coagulation and hemostatic pathways. It operates by modulating the activity of vWF which plays an essential role in platelet adhesion and aggregation forming part of the coagulation cascade. A significant relationship exists between ADAMTS13 and vWF in these pathways as the protease controls vWF multimer size directly impacting clot formation. In the context of hemostatic balance ADAMTS13 intersects with factors like thrombin and fibrinogen which further contribute to clotting processes.
Associated diseases and disorders	ADAMTS13 deficiency or dysfunction is associated with thrombotic thrombocytopenic purpura (TTP) a rare but severe blood disorder. In TTP the reduced activity of ADAMTS13 leads to an over-accumulation of ultra-large vWF multimers resulting in excessive platelet aggregation and microvascular thrombosis. Another related condition is atypical hemolytic uremic syndrome (aHUS) where abnormal ADAMTS13 activity might exacerbate the disease pathology. Both disorders highlight the critical need for balanced ADAMTS13 function in maintaining vascular health and highlight its potential as a therapeutic target.

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

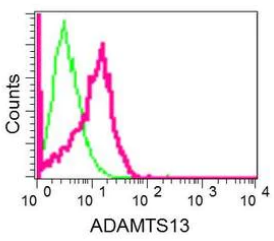
We do not recommend this combination. It is not covered by our product promise.

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.

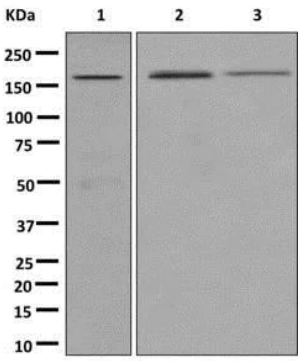
2 product images



Flow Cytometry (Intracellular) - Anti-ADAMTS13 antibody [EPR6132] (ab177940)

ADAMTS13 Flow Cytometry (Intracellular) staining using rabbit Anti-ADAMTS13 antibody

Intracellular flow cytometric analysis of permeabilized A549 cells labeling ADAMTS13 with ab177940at 1/100 dilution.



Western blot - Anti-ADAMTS13 antibody [EPR6132] (ab177940)

All lanes:
Western blot - Anti-ADAMTS13 antibody [EPR6132] (ab177940) at 1/1000 dilution

Lane 1:
Human fetal liver lysate at 10 µg

Lane 2:
A549 cell lysate at 10 µg

Lane 3:
HepG2 lysate at 10 µg

Predicted band size: 154 kDa

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