abcam

ab256457

Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4]

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	EPR22855-4
Purification technique	Affinity purification Protein A
Concentration	0.569 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/500
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Target data

See full target information EFEMP1

Function	Binds EGFR, the EGF receptor, inducing EGFR autophosphorylation and the activation of downstream signaling pathways. May play a role in cell adhesion and migration. May function as a negative regulator of chondrocyte differentiation. In the olfactory epithelium, it may regulate glial cell migration, differentiation and the ability of glial cells to support neuronal neurite outgrowth.

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	EFEMP1 also known as Fibulin-3 is a member of the fibulin family involved in extracellular matrix (ECM) organization. The protein's mass is approximately 55 kDa. It is expressed in various tissues but researchers find it most common in the eye lung and arterial walls. As a secreted glycoprotein Fibulin-3 plays a vital role in maintaining structural integrity and elasticity in connective tissues.

Biological function summary	EFEMP1/Fibulin-3 participates in ECM modulation and cell signaling. It interacts with other ECM components such as fibronectin and collagen contributing to structural assembly and stability. Although not prominently part of multi-protein complexes Fibulin-3 influences cellular adhesion and migration impacting tissue development and repair mechanisms. Researchers observe its expression during embryogenesis suggesting a role in developmental processes.
Pathways	EFEMP1/Fibulin-3 integrates into matrix-related pathways impacting tissue architecture. It plays a role in the EGF (Epidermal Growth Factor) signaling pathway which is important for various cell survival and proliferation processes. Fibulin-3 exhibits functional relationships with proteins like fibronectin and integrins within these pathways highlighting its importance in mediating cell-matrix interactions and influencing signal transduction cascades.
Associated diseases and disorders	EFEMP1/Fibulin-3 has notable connections with certain pathologies. Malfunctions in its expression or structure can relate to age-related macular degeneration and various forms of cancer including mesothelioma. In these diseases Fibulin-3 interacts with proteins such as matrix metalloproteinases which degrade extracellular matrix proteins thereby influencing tumor progression and ECM remodeling in affected tissues.

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

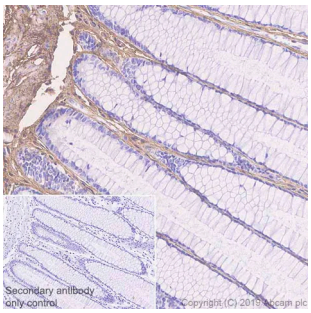
We do not recommend this combination. It is not covered by our product promise.

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.

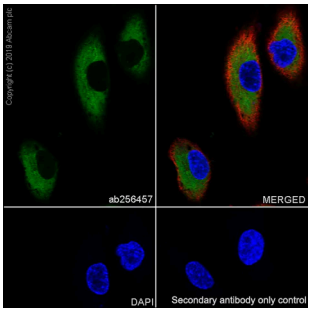
8 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EFEMP1/Fibulin-3 antibody

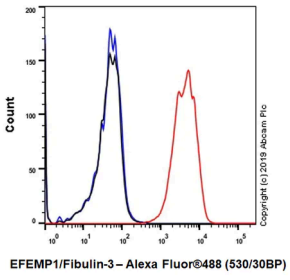
Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling EFEMP1/Fibulin-3 with ab256457 at 1/500 dilution (1.12 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on the stromal cells of human colon. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. The section was incubated with ab256457 for 15 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunocytochemistry/ Immunofluorescence - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-EFEMP1/Fibulin-3 antibody

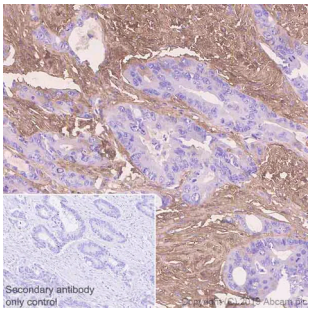
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HUVEC (human umbilical vein endothelial cell) cells labelling EFEMP1/Fibulin-3 with ab256457 at 1/500 dilution, followed by ab256457 anti-EFEMP1 Fibulin-3 ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in HUVEC cell line is observed. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 Flow Cytometry (Intracellular) staining using rabbit Anti-EFEMP1/Fibulin-3 antibody

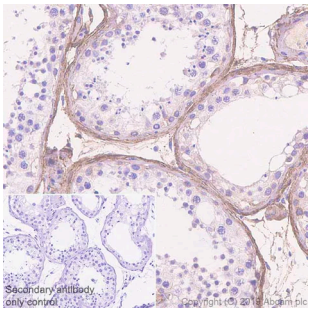
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HUVEC (human umbilical vein endothelial cell) cells labelling EFEMP1/Fibulin-3 with ab256457 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Black) and an unlabelled 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EFEMP1/Fibulin-3 antibody

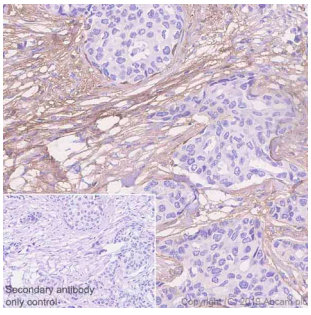
Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue labeling EFEMP1/Fibulin-3 with ab256457 at 1/500 dilution (1.12 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on the stromal cells of human colon carcinoma. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. The section was incubated with ab256457 for 15 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EFEMP1/Fibulin-3 antibody

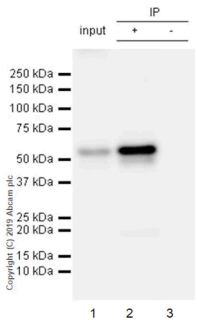
Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling EFEMP1/Fibulin-3 with ab256457 at 1/500 dilution (1.12 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. Positive staining on the basement membrane in human testes. The section was incubated with ab256457 for 15 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
Secondary antibody only control/ Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-EFEMP1/Fibulin-3 antibody

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling EFEMP1/Fibulin-3 with ab256457 at 1/500 dilution (1.12 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining on the stroma cells of human breast carcinoma (PMID/ 19115204). The section was incubated with ab256457 for 15 mins at RT. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunoprecipitation - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

EFEMP1/Fibulin-3 was immunoprecipitated from 0.35 mg HUVEC (human umbilical vein endothelial cell) whole cell lysate with ab256457 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab256457 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: HUVEC (human umbilical vein endothelial cell) whole cell lysate 10ug

Lane 2: ab256457 IP in HUVEC whole cell lysate

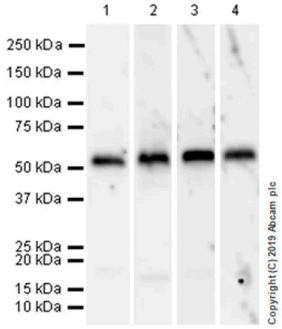
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab256457 in HUVEC whole cell lysate

Blocking and dilution buffer and concentration/ 5% NFDM/TBST.

Exposure time: 1 second

All lanes:
Immunoprecipitation - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

Predicted band size: 54 kDa



Western blot - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457)

The molecular weight observed is consistent with what has been described in the literature (PMID: 28740094).
Blocking/Diluting buffer and concentration: 5% NFDM/TBST.

Exposure Time: Lane 1:103 seconds; Lane 2:8 seconds; Lane 3:15 seconds; Lane 4:48 seconds.

All lanes:
Western blot - Anti-EFEMP1/Fibulin-3 antibody [EPR22855-4] (ab256457) at 1/1000 dilution

Lane 1:
HUVEC (human umbilical vein endothelial cell) whole cell lysate at 20 µg

Lane 2:
Human eye tissue lysate at 20 µg

Lane 3:
Human ovary lysate at 20 µg

Lane 4:
Human skeletal muscle lysate at 20 µg

Secondary

All lanes:
Western blot - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Predicted band size: 54 kDa

Observed band size: 55 kDa

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