abcam

ab248951

Anti-EG-VEGF antibody [EPR9699] - 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	EPR9699
Purification technique	Affinity purification
Concentration	0.997 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Mouse, Human
Dilution info	-

Notes	-

IP

Not recommended

Species	Mouse, Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.

Notes	-

Target data

See full target information PROK1

Function	Potently contracts gastrointestinal (GI) smooth muscle. Induces proliferation, migration and fenestration (the formation of membrane discontinuities) in capillary endothelial cells derived from endocrine glands. Has little or no effect on a variety of other endothelial and non-endothelial cell types. Induces proliferation and differentiation, but not migration, of enteric neural crest cells. Directly influences neuroblastoma progression by promoting the proliferation and migration of neuroblastoma cells. Positively regulates PTGS2 expression and prostaglandin synthesis. May play a role in placentation. May play a role in normal and pathological testis angiogenesis.

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

ab248951 is the carrier-free version of ab150375.

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.

Species reactivity

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

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	EG-VEGF also known as endocrine gland-derived vascular endothelial growth factor or prokineticin 1 is a potent angiogenic mitogen. It typically has a molecular mass of around 9 kDa. EG-VEGF is expressed mainly in steroidogenic tissues such as the ovaries testes adrenal glands and placenta. It targets endothelial cells selectively within these glands inducing various responses like proliferation migration and fenestration. This selectivity makes it distinct from vascular endothelial growth factor A (VEGF-A) which has a broader expression pattern.
Biological function summary	EG-VEGF plays a critical role in the formation and remodeling of blood vessels specific to endocrine glands. It is not part of a larger protein complex but operates through interaction with its receptor prokineticin receptor 1 (PROKR1). This unique interaction means that it has a specific ligand-receptor activity contributing to the regulation of vascular development especially in tissues undergoing hormonal changes. This makes EG-VEGF significant in contexts where localized and specific angiogenesis is essential.
Pathways	EG-VEGF is important in the regulation of angiogenesis and endothelial function. It fits into pathways that influence cell signaling associated with vascular development. One such pathway is the hypoxia-inducible factor (HIF) pathway which enhances the expression of EG-VEGF under low oxygen conditions. Another related protein is vascular endothelial growth factor (VEGF) whereby VEGF and EG-VEGF demonstrate distinctive yet occasionally overlapping functions in angiogenesis optimizing vascular growth within specific environments.
Associated diseases and disorders	EG-VEGF shows associations with conditions like preeclampsia and polycystic ovary syndrome (PCOS). Preeclampsia involves improper vascularization in the placenta where EG-VEGF's role in angiogenesis becomes critical as it may help or disrupt proper vascular development. Polycystic ovary syndrome a hormonal disorder impacting ovaries also links with EG-VEGF through its effect on ovarian blood vessels. These disorders highlight potential therapeutic targets considering EG-VEGF’s integration with other proteins like PROKR1 which could modulate its angiogenic functions.

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.

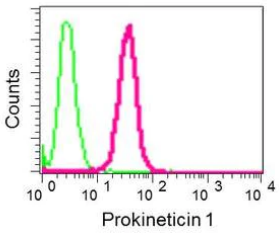
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

---

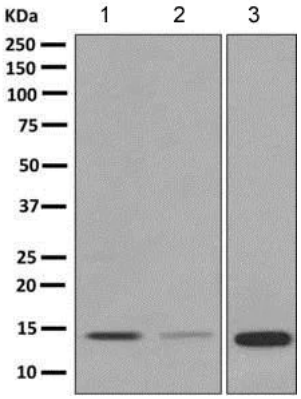
2 product images



Flow Cytometry (Intracellular) - Anti-EG-VEGF antibody [EPR9699] - BSA and Azide free (ab248951)

EG-VEGF Flow Cytometry (Intracellular) staining using rabbit Anti-EG-VEGF antibody

This data was developed using ab150375, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized NIH/3T3 cells labelling EG-VEGF with ab150375 at 1/10 dilution (red) or a Rabbit IgG (negative, green).



Western blot - Anti-EG-VEGF antibody [EPR9699] - BSA and Azide free (ab248951)

EG-VEGF Western blot staining using rabbit Anti-EG-VEGF antibody

This data was developed using ab150375, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-EG-VEGF antibody [EPR9699] (ab150375) at 1/1000 dilution

Lane 1:
Raw 264.7 cell lysate at 10 µg

Lane 2:
NIH/3T3 cell lysate at 10 µg

Lane 3:
ECV-304 cell lysate at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 12 kDa

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