abcam

Product datasheet

Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free ab234106

Recombinant RabMAb

6 Images

Overview

Product name	Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free
Description	Rabbit monoclonal [EPR21884-236] to VEGF Receptor 2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Indirect ELISA, Flow Cyt, ICC/IF
Species reactivity	**Reacts with:** Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	ICC/IF: bEnd.3 cells. Flow Cyt: bEnd.3 cells.
General notes	ab234106 is the carrier-free version of **ab233693**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. 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. 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. 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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21884-236
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab234106 in the following tested applications.

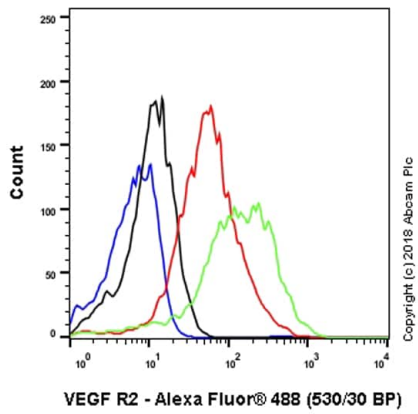
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Indirect ELISA		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Receptor for VEGF or VEGFC. Has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.
Involvement in disease	Defects in KDR are associated with susceptibility to hemangioma capillary infantile (HCI) [MIM:602089]. HCI are benign, highly proliferative lesions involving aberrant localized growth of capillary endothelium. They are the most common tumor of infancy, occurring in up to 10% of all births. Hemangiomas tend to appear shortly after birth and show rapid neonatal growth for up to 12 months characterized by endothelial hypercellularity and increased numbers of mast cells. This phase is followed by slow involution at a rate of about 10% per year and replacement by fibrofatty stroma.
Sequence similarities	Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily. Contains 7 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylated. Dephosphorylated by PTPRB. Dephosphorylated by PTPRJ at Tyr-951, Tyr-996, Tyr-1054, Tyr-1059, Tyr-1175 and Tyr-1214.
Cellular localization	Membrane.

Images



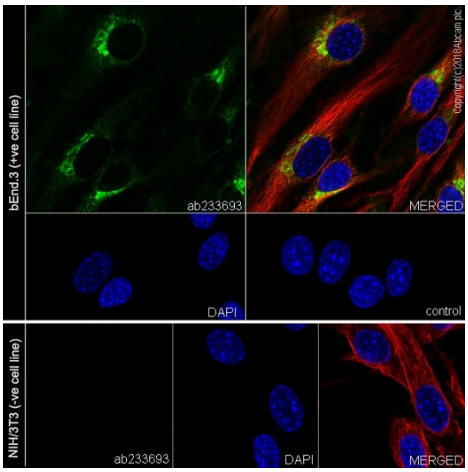
Flow Cytometry - Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free (ab234106)

Flow cytometric analysis of bEnd.3 (mouse brain endothelioma cell line) cell line treated with 1 µg/ml Brefeldin A for 3 hours (red) and an untreated control (green) labeling VEGF Receptor 2 with **ab233693** at 1/500 dilution treated with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

BFA treatment reduced cell surface VEGF Receptor 2 [PMID: 21063020].

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233693**).



Immunocytochemistry/ Immunofluorescence - Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free (ab234106)

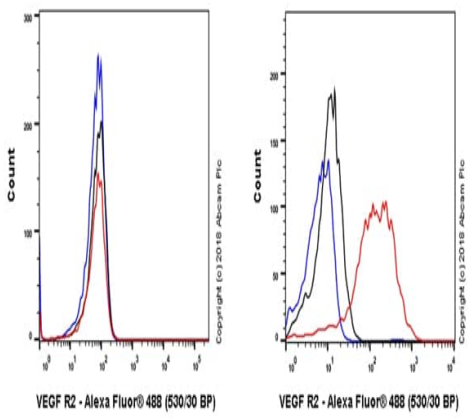
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized bEnd.3 (mouse brain endothelioma cell line) and NIH/3T3 (mouse embryo fibroblast cell line) cells labeling VEGF Receptor 2 with **ab233693** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing perinuclear staining in bEnd.3 cells.

Negative control: NIH/3T3 [PMID: 20978347].

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233693**).



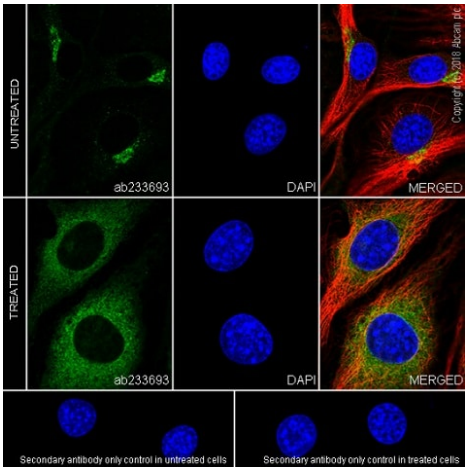
Flow Cytometry - Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free (ab234106)

Flow cytometric analysis of bEnd.3 (mouse brain endothelioma cell line, right) and NIH/3T3 (mouse embryo fibroblast cell line, left) cell line labeling VEGF Receptor 2 with **ab233693** at 1/500 dilution compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

Negative control: NIH/3T3 [PMID: 20978347].

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233693**).



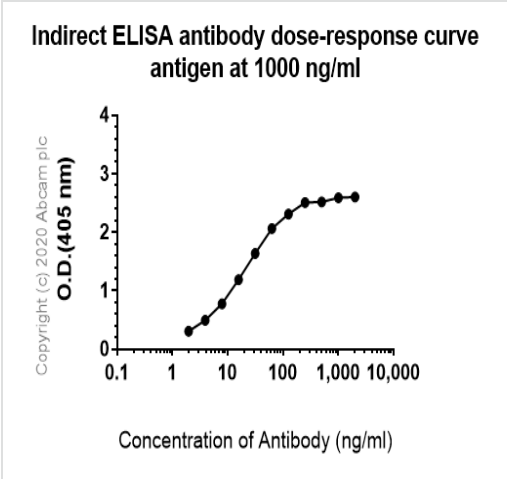
Immunocytochemistry/ Immunofluorescence - Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free (ab234106)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized bEnd.3 (mouse brain endothelioma) cells labeling VEGF Receptor 2 with **ab233693** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Redistribution of the VEGF Receptor 2 from the perinuclear Golgi to vesicular structures throughout the cytosol after treatment with Brefeldin A (1 µg/ml, 3 hours) in bEnd.3. BFA treatment alters the subcellular localisation of VEGF Receptor 2 [PMID: 21063020].

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab233693**).



Indirect ELISA - Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free (ab234106)

This data was developed using **ab233693**, the same antibody clone in a different buffer formulation.

ELISA analysis of Mouse VEGF R2 recombinant protein at 1000 ng/ml with **ab233693**. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

Anti-VEGF Receptor 2 antibody [EPR21884-236] - BSA and Azide free (ab234106)

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