

Anti-Eph receptor A2 antibody [EPR18735-118] - BSA and Azide free (Detector) ab242859

Recombinant RabMAb

1 Image

Overview

Product name	Anti-Eph receptor A2 antibody [EPR18735-118] - BSA and Azide free (Detector)
Description	Rabbit monoclonal [EPR18735-118] to Eph receptor A2 - BSA and Azide free (Detector)
Host species	Rabbit
Tested applications	Suitable for: Sandwich ELISA
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>ab242859 is a BSA and Azide Free antibody supplied in an unconjugated format and it is suitable for sandwich ELISAs to quantify Human EphA2. The recommended pair for sandwich ELISA is:</p> <p>Capture: ab242613, Human EphA2 Capture Antibody (unconjugated) Detector: ab242859, Human EphA2 Detector Antibody (unconjugated)</p> <p>The reference range value is 7.81 - 500 pg/ml.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Please note that the range provided for this antibody is only an estimation based on the performance of the product using the recommended antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody in your assay.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p>

- 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.
Storage buffer	Constituent: 100% PBS
Carrier free	Yes
Clonality	Monoclonal
Clone number	EPR18735-118
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab242859 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
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [EPR18735-112] to Eph receptor A2 - BSA and Azide free (Capture) (ab242613) .

Target

Function	Receptor for members of the ephrin-A family. Binds to ephrin-A1, -A3, -A4 and -A5. Plays an important role in angiogenesis and tumor neovascularization. The recruitment of VAV2, VAV3 and PI3-kinase p85 subunit by phosphorylated EPFA2 is critical for EFNA1-induced RAC1 GTPase activation and vascular endothelial cell migration and assembly (By similarity). Induces apoptosis in a p53/TP53-independent, caspase-8-dependent manner.
Tissue specificity	Expressed in brain and glioma tissue and glioma cell lines (at protein level). Expressed most highly in tissues that contain a high proportion of epithelial cells, e.g., skin, intestine, lung, and ovary.
Involvement in disease	Genetic variations in EPFA2 are the cause of susceptibility to cataract cortical age-related type 2 (ARCC2) [MIM:613020]. A developmental punctate opacity common in the cortex and present in most lenses. The cataract is white or cerulean, increases in number with age, but rarely affects vision. Defects in EPFA2 are the cause of cataract posterior polar type 1 (CTPP1) [MIM:116600]. A subcapsular opacity, usually disk-shaped, located at the back of the lens. It can have a marked

effect on visual acuity.

Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.
Contains 2 fibronectin type-III domains.
Contains 1 protein kinase domain.
Contains 1 SAM (sterile alpha motif) domain.

Post-translational modifications

Activated by EFNA1 via tyrosine phosphorylation. Phosphorylated residues Tyr-588 and Tyr-594 are required for binding VAV2 and VAV3 while phosphorylated residues Tyr-735 and Tyr-930 are required for binding PI3-kinase p85 subunit. These phosphorylated residues are critical for recruitment of VAV2 and VAV3 and PI3-kinase p85 subunit which transduce downstream signaling to activate RAC1 GTPase and endothelial cell migration. They also play a critical role in transducing EPHA2 signaling in vascular endothelial cells during tumor angiogenesis.

Cellular localization

Membrane.

Images

Why choose α recombinant antibody?



Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-Eph receptor A2 antibody [EPR18735-118] -
BSA and Azide free (Detector) (ab242859)

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