

Product datasheet

Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] - BSA and Azide free ab188171

Recombinant RabMAb

4 Images

Overview

Product name	Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] - BSA and Azide free
Description	Rabbit monoclonal [EPR5684] to EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) - BSA and Azide free
Host species	Rabbit
Specificity	This antibody only detects EPH A3 phosphorylated at Tyrosine 779, EPH A4 phosphorylated at Tyrosine 779, and EPH A5 phosphorylated at Tyrosine 833.
Tested applications	Suitable for: WB Unsuitable for: ICC/IF or IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human EPH A3+A4+A5 (phospho Y779 + Y779 + Y833). The exact sequence is proprietary. P29320, P54756, P54764.
Positive control	HeLa cell lysate (untreated/treated with Sodium Orthovanadate). Prepare 500mM stock Sodium Orthovanadate in PBS. When ready to treat cells add 400µl 500mM Sodium Orthovanadate to 1560µl H2O and then 40µl H2O2, vortex and incubate at RT for 5-10min. Serum-starve cells overnight, and treat with the freshly made Pervanadate for 20min at 37°C.
General notes	Ab188171 is the carrier-free version of ab124881 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

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.

ab188171 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

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](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

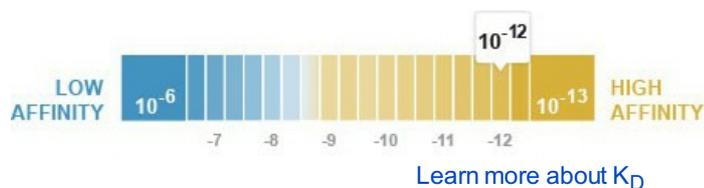
We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Dissociation constant (K_D)	K _D = 1.30 x 10 ⁻¹² M



Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR5684
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab188171** 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
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WB Use at an assay dependent concentration. Detects a band of approximately 133 kDa (predicted molecular weight: 110, 115 kDa).

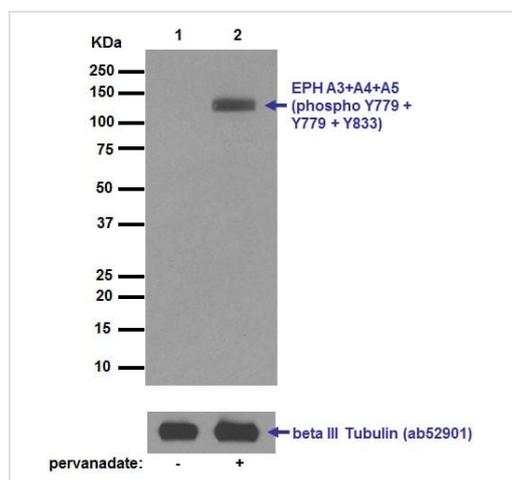
Application notes Is unsuitable for ICC/IF or IHC-P.

Target

Relevance Receptor tyrosine kinase which binds promiscuously GPI-anchored ephrin-A family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Among GPI-anchored ephrin-A ligands, EFNA5 most probably constitutes the cognate/functional ligand for EPHA5. Functions as an axon guidance molecule during development and may be involved in the development of the retinotectal, entorhino-hippocampal and hippocamposeptal pathways. Together with EFNA5 plays also a role in synaptic plasticity in adult brain through regulation of synaptogenesis. Beside its function in the nervous system, the interaction of EPHA5 with EFNA5 mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion.

Cellular localization Cell Membrane

Images



Western blot - Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] - BSA and Azide free (ab188171)

All lanes : Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] ([ab124881](#)) at 1/10000 dilution (purified)

Lane 1 : Untreated HEK293 cell lysate

Lane 2 : HEK293 cell lysate treated with pervanadate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

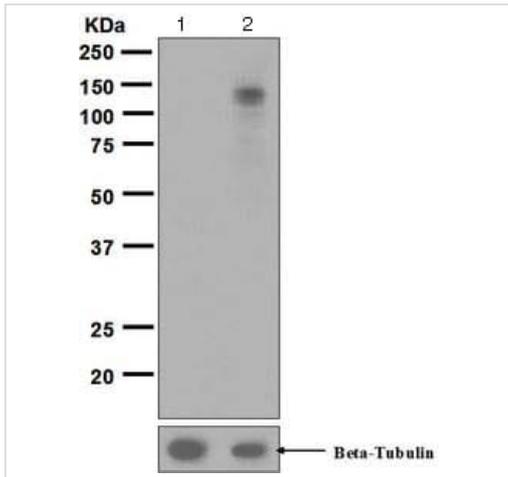
Predicted band size: 110, 115 kDa

Observed band size: 133 kDa

[why is the actual band size different from the predicted?](#)

This data was developed using [ab124881](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] - BSA and Azide free (ab188171)

All lanes : Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] ([ab124881](#)) at 1/1000 dilution (unpurified)

Lane 1 : HeLa cell lysate untreated

Lane 2 : HeLa cell lysate treated with Sodium Orthovanadate. See suggested positive control for more treatment information.

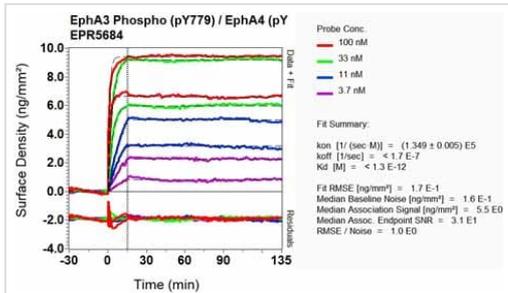
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 110, 115 kDa

This data was developed using [ab124881](#), the same antibody clone in a different buffer formulation.



OIR-D Scanning - Anti-EPH A3+A4+A5 (phospho Y779 + Y779 + Y833) antibody [EPR5684] - BSA and Azide free (ab188171)

This data was developed using [ab124881](#), the same antibody clone in a different buffer formulation. Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a 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

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Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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