Overview

Product name: Anti-Ephrin B2 antibody [EFR163M]
Description: Mouse monoclonal [EFR163M] to Ephrin B2
Host species: Mouse
Tested applications: 
Suitable for: ICC/IF, IHC-P
Unsuitable for: Flow Cyt, IP or WB
Species reactivity: Reacts with: Human
Immunogen: Recombinant fragment. This information is considered to be commercially sensitive.
Positive control: IHC-P: Human skin and tonsil tissue. ICC/IF: A431 and A549 cells.
General notes: This antibody clone is manufactured by Abcam. If you require a different buffer formulation or a particular conjugate for your experiments, please contact orders@abcam.com.
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.

Properties

Form: Liquid
Storage buffer: Preservative: 0.01% Sodium azide
Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity: Protein A purified
Clonality: Monoclonal
Clone number: EFR163M
Isotype: IgG1
Applications

Our Abpromise guarantee covers the use of ab241556 in the following tested applications.

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>1/50</td>
<td>100% methanol fixation is recommended.</td>
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<tr>
<td>IHC-P</td>
<td>1/100</td>
<td>Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
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</table>

Application notes

Is unsuitable for Flow Cyt, IP or WB.

Target

Function

Cell surface transmembrane ligand for Eph receptors, a family of receptor tyrosine kinases which are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development. Binds promiscuously Eph receptors 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. Binds to receptor tyrosine kinase including EPHA4, EPHA3 and EPHB4. Together with EPHB4 plays a central role in heart morphogenesis and angiogenesis through regulation of cell adhesion and cell migration. EPHB4-mediated forward signaling controls cellular repulsion and segregation from EFNB2-expressing cells. May play a role in constraining the orientation of longitudinally projecting axons.

(Microbial infection) Acts as a receptor for Hendra virus and Nipah virus.

Tissue specificity

Lung and kidney.

Sequence similarities

Belongs to the ephrin family.

Contains 1 ephrin RBD (ephrin receptor-binding) domain.

Post-translational modifications

Inducible phosphorylation of tyrosine residues in the cytoplasmic domain.

Cellular localization

Membrane.

Images
Immunohistochemical analysis of paraffin-embedded human skin tissue labeling Ephrin B2 with ab241556 at 1/100 dilution, followed by ready to use Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879). Positive staining on human skin tissue is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, followed by ready to use Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879).

Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

Immunofluorescent analysis of 100% methanol-fixed A431 (human epidermoid carcinoma epithelial cell line) cells labeling Ephrin B22 with ab241556 at 1/50 dilution, followed by Goat Anti-Mouse IgG (Alexa Fluor® 488) (ab150113) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on A431 cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with ab179504 Anti-beta IV Tubulin antibody - Microtubule Marker at 1/1000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 594) (ab150080) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:
- ve control 1: ab241556 at 1/50 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 594) (ab150080) secondary antibody at 1/1000 dilution.
- ve control 2: ab179504 at 1/200 dilution, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary at 1/1000 dilution.
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling Ephrin B2 with ab241556 at 1/100 dilution, followed by ready to use Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879). Positive staining on epithelial cells of human tonsil tissue is observed. Counterstained with hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, followed by ready to use Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879).
Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

Immunofluorescent analysis of 100% methanol-fixed A549 (human lung carcinoma epithelial cell line) cells labeling Ephrin B22 with ab241556 at 1/50 dilution, followed by Goat Anti-Mouse IgG (Alexa Fluor® 488) (ab150113) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on A549 cell line. The nuclear counterstain is DAPI (blue).
Tubulin is detected with ab179504 Anti-beta IV Tubulin antibody - Microtubule Marker at 1/1000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 594) (ab150080) secondary antibody at 1/1000 dilution (red).
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-ve control 2: ab179504 at 1/200 dilution, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary at 1/1000 dilution.

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

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