abcam

Product datasheet

Anti-Eph receptor A4/SEK antibody ab5389

1 References 8 Images

Overview

Product name	Anti-Eph receptor A4/SEK antibody
Description	Rabbit polyclonal to Eph receptor A4/SEK
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, ICC/IF, IHC-FrFl, Flow Cyt, WB
Species reactivity	**Reacts with:** Rat, Human
Immunogen	Synthetic peptide corresponding to Human Eph receptor A4/SEK aa 40-70 (N terminal) conjugated to keyhole limpet haemocyanin.
Positive control	WB: HeLa whole cell lysate. IHC-P: Human breast carcinoma tissue. IHC-FrFl: Rat cortex tissue. ICC/IF: Human stem cells. FC: CEM cells.
General notes	This product was previously labelled as Eph receptor A4

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Ammonium Sulphate Precipitation
Purification notes	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Primary antibody notes	Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about

	90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab5389** in the following tested applications.

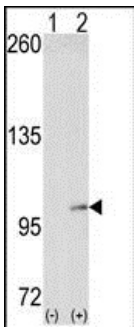
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/50 - 1/100.
ICC/IF		1/100.
IHC-FrFl		1/100 - 1/300.
Flow Cyt		1/10 - 1/50. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Detects a band of approximately 108 kDa (predicted molecular weight: 118 kDa).

Target

Function	Receptor for members of the ephrin-A family. Binds to ephrin-A1, -A4 and -A5. Binds more poorly to ephrin-A2 and -A3. May play a role in a signal transduction process involved in hindbrain pattern formation.
Tissue specificity	Ubiquitous.
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.
Domain	The protein kinase domain mediates interaction with NGEF/ephexin-1.
Cellular localization	Membrane.

Images



Western blot - Anti-Eph receptor A4/SEK antibody (ab5389)

All lanes : Anti-Eph receptor A4/SEK antibody (ab5389) at 1/1000 dilution

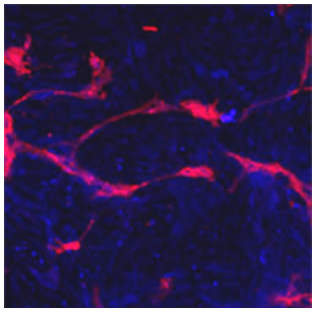
Lane 1 : 293 cell lysate - nontransfected
Lane 2 : 293 cell lysate - transfected with EphA4

Lysates/proteins at 2 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution

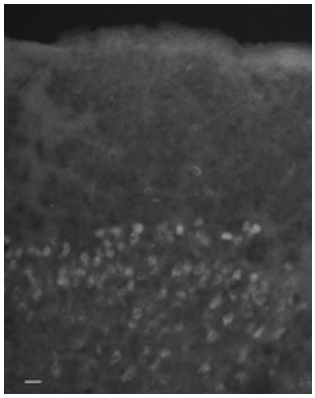
Predicted band size: 118 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Eph receptor A4/SEK antibody (ab5389)

Immunofluorescent staining of methanol/acetone fixed human stem cells for Eph4A (blue) and endothelial Lectin(red). Data kindly provided by Dr. Weis from Cheresh Lab, UCSD.

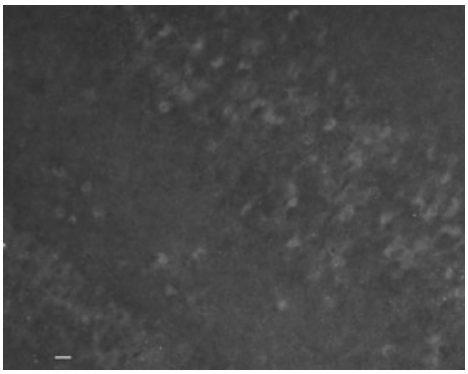


Immunohistochemistry - Free Floating - Anti-Eph receptor A4/SEK antibody (ab5389)

This image is courtesy of Sophie Pezet, King's College London, United Kingdom

ab5389 EphA4 antibody immunostaining cortical neurons (image taken at X2; cytoplasmic staining).Bar=20 microns.

Protocol: ab5389 incubated overnight at room temperature at a dilution of 1/100-1/300 on free floating perfusion fixed coronal sections of brain. Immunostaining visualised by direct fluorescence (Alexa Fluor® 488, 1/1000).

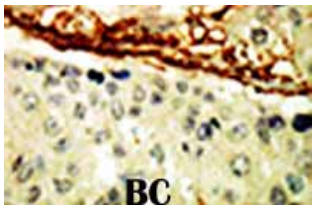


Immunohistochemistry - Free Floating - Anti-Eph receptor A4/SEK antibody (ab5389)

This image is courtesy of Sophie Pezet, King's College London, United Kingdom

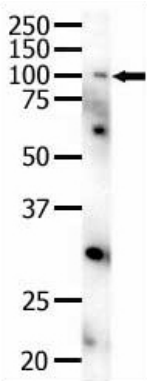
ab5389 EHpA4 antibody immunostaining hippocampal neurons (X2 magnification; cytoplasmic staining). Bar: 20 microns.

Protocol: ab5389 incubated overnight at room temperature at a dilution of 1/100-1/300 on free floating perfusion fixed coronal sections of brain. Immunostaining visualised by direct fluorescence (Alexa Fluor® 488, 1/1000).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Eph receptor A4/SEK antibody (ab5389)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma (BC) tissue labeling Eph receptor A4/SEK with ab5389 at 1/25. Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at 37°C. Heat mediated antigen retrieval was performed using a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A Peroxidase-conjugated Goat anti-rabbit polyclonal (ready to use) was used as the secondary antibody.

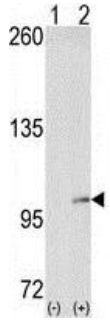


Western blot - Anti-Eph receptor A4/SEK antibody (ab5389)

Anti-Eph receptor A4/SEK antibody (ab5389) at 1/100 dilution + HeLa cell lysate

Secondary
HRP-conjugated anti-rabbit IgG

Predicted band size: 118 kDa



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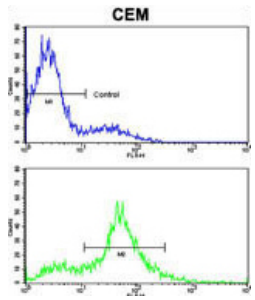
Predicted band size: 118 kDa



Flow Cytometry - Anti-Eph receptor A4/SEK antibody (ab5389)

Flow cytometry analysis of CEM cells labelling Eph receptor A4/SEK (green) with ab5389 compared to a negative control (blue). The cells were fixed with paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 3% BSA to block non-specific protein-protein interactions followed by the antibody (ab5389, 1µg/1x10^6 cells) for 60 min at 37ºC. The secondary antibody used was FITC conjugated Goat anti-Rabbit antibodies at 1/200 dilution for 40 min at room temperature. Blank control (blue line) was used under the same conditions. Acquisition of >10,000 events was performed.

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