

Anti-Eph receptor A5 antibody ab5397

1 References 3 图像

概述

产品名称	Anti-Eph receptor A5抗体
描述	兔多克隆抗体to Eph receptor A5
宿主	Rabbit
经测试应用	适用于: IHC-Fr, ICC/IF, IHC-P, ELISA, WB
种属反应性	与反应: Mouse, Human
免疫原	Synthetic peptide conjugated to KLH, corresponding to amino acids 32-43 of Human Eph A5.
阳性对照	WB: mouse brain lysate IHC: breast carcinoma ELISA: immunizing peptide This antibody gave a positive result when used in the following formaldehyde fixed cell lines: SKNSH.

常规说明

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ 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).

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.09% Sodium Azide Constituents: PBS
纯度	Protein G purified
纯化说明	This antibody is purified through a protein G column and eluted out with both high and low pH buffers and neutralized immediately after elution then followed by dialysis against PBS.

Primary antibody说明

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ 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).

克隆

多克隆

同种型

IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab5397** in the following tested applications.

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

应用	Ab评论	说明
IHC-Fr		Use at an assay dependent concentration. PubMed: 23242526
ICC/IF		Use a concentration of 1 μ g/ml.
IHC-P		1/50 - 1/100.
ELISA		1/1000.
WB		1/100 - 1/500. Detects a band of approximately 114 kDa (predicted molecular weight: 124 kDa).

靶标

功能

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.

组织特异性

Almost exclusively expressed in the nervous system in cortical neurons, cerebellar Purkinje cells and pyramidal neurons within the cortex and hippocampus. Display an increasing gradient of expression from the forebrain to hindbrain and spinal cord.

序列相似性

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

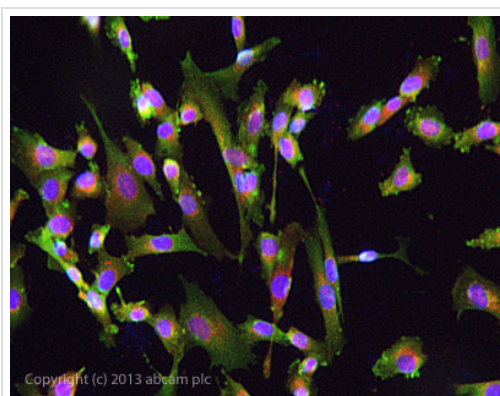
翻译后修饰

Phosphorylated. Phosphorylation is stimulated by the ligand EFNA5. Dephosphorylation upon stimulation by glucose, inhibits EPHA5 forward signaling and results in insulin secretion.

细胞定位

Cell membrane. Cell projection > axon. Cell projection > dendrite.

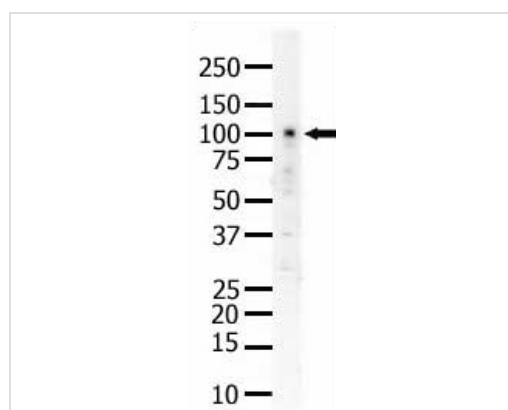
图片



Immunocytochemistry/ Immunofluorescence - Anti-Eph receptor A5 antibody (ab5397)

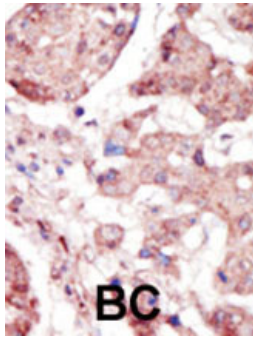
ICC/IF image of ab5397 stained SKNSH cells.

The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab5397 at 1µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit ([ab96899](#)) IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Eph receptor A5 antibody (ab5397)

ab5397 at a 1/100 dilution staining approximately 114kDa band of Eph A5 in mouse brain tissue by Western blot (ECL).
ab5397 at a 1/100 dilution staining approximately 114kDa band of Eph A5 in mouse brain tissue by Western blot (ECL).



ab5397 staining Eph receptor A5 in human breast carcinoma (BC) tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). ab5397 was peroxidase-conjugated to the secondary antibody, followed by AEC staining.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Eph receptor A5 antibody (ab5397)

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