磷酸化内皮细胞受体蛋白酪氨酸激酶 A2+A3+A4 抗体

产品货号： mlR7554

英文名称： phospho-Eph receptor A2+A3+A4 (Tyr588 + Tyr596)

中文名称： 磷酸化内皮细胞受体蛋白酪氨酸激酶 A2+A3+A4 抗体

别　　名： Eph receptor A2+A3+A4(phospho Y588 + Y596) ECK; EPH Receptor A2; EPH Receptor A3; EPH Receptor A4; EPHA2; EPHA3; EPHA4; Ephrin type A receptor 2; Ephrin type A receptor 3; Ephrin type A receptor 4; Epithelial cell kinase; ETK; ETK1; HEK; HEK4; HEK8; Receptor protein tyrosine kinase HEK8; SEK; TYRO4; Tyrosine protein kinase receptor SEK; Tyrosine protein kinase TYRO1; Tyrosine protein kinase TYRO4; Tyrosine-protein kinase receptor ECK; Tyrosine-protein kinase receptor ETK1.

产品类型： 磷酸化抗体

研究领域： 心血管　细胞生物　神经生物学　信号转导　激酶和磷酸酶　细胞膜受体

抗体来源： Rabbit

克隆类型： **Polyclonal**

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 105kDa

细胞定位： 细胞膜

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthesised phosphopeptide derived from human Eph receptor A2 around the phosphorylation site of Tyr588 + Tyr596:KT(p-Y)VD <Cytoplasmic>

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted

in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed : **PubMed**

产品介绍 : Eph receptor A2 is the receptor for members of the ephrin-A family. It binds to ephrin-A1, -A3, -A4 and -A5. Eph receptor A3 is also a receptor for members of the ephrin-A family. It binds to ephrin-A2, -A3, -A4 and -A5 and is thought to play a role in lymphoid function. Eph receptor A4 is a receptor for members of the ephrin-A family. It binds to ephrin-A1, -A4 and -A5. It binds more poorly to ephrin-A2 and -A3. It may play a role in a signal transduction process involved in hindbrain pattern formation.

Function:

Receptor tyrosine kinase which binds promiscuously membrane-bound 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. Activated by the ligand ephrin-A1/EFNA1 regulates migration, integrin-mediated adhesion, proliferation and differentiation of cells. Regulates cell adhesion and differentiation through DSG1/desmoglein-1 and inhibition of the ERK1/ERK2 (MAPK3/MAPK1, respectively) signaling pathway. May also participate in UV radiation-induced apoptosis and have a ligand-independent stimulatory effect on chemotactic cell migration. During development, may function in distinctive aspects of pattern formation and subsequently in development of several fetal tissues. Involved for instance in angiogenesis, in early hindbrain development and epithelial proliferation and branching morphogenesis during mammary gland development. Engaged by the ligand ephrin-A5/EFNA5 may regulate lens fiber cells shape and interactions and be important for lens transparency development and maintenance. With ephrin-A2/EFNA2 may play a role in bone remodeling through regulation of osteoclastogenesis and osteoblastogenesis.

Subunit:

Homodimer. Interacts with SLA. Interacts (phosphorylated form) with VAV2, VAV3 and PI3-kinase p85 subunit (PIK3R1, PIK3R2 or PIK3R3); critical for the EFNA1-induced activation of RAC1 which stimulates cell migration. Interacts with ANKS1A. Interacts with INPPL1; regulates activated EPHA2 endocytosis and degradation. Interacts (inactivated form) with PTK2/FAK1 and interacts (EFNA1 ligand-activated form) with PTPN11; regulates integrin-mediated adhesion. Interacts with ARHGEF16, DOCK4 and ELMO2; mediates ligand-independent activation of

RAC1 which stimulates cell migration. Interacts with CLDN4; phosphorylates CLDN4 and may regulate tight junctions. Interacts with ACP1.

Subcellular Location:

Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Cell projection, lamellipodium membrane; Single-pass type I membrane protein. Cell junction, focal adhesion. Note=Present at regions of cell-cell contacts but also at the leading edge of migrating cells.

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.

Post-translational modifications:

Autophosphorylates. Phosphorylated on tyrosine upon binding and activation by EFNA1. 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 (PIK3R1, PIK3R2 or PIK3R3). 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 cell migration. Phosphorylated at Ser-897 by PKB; serum-induced phosphorylation which targets EPHA2 to the cell leading edge and stimulates cell migration. Phosphorylation by PKB is inhibited by EFNA1-activated EPHA2 which regulates PKB activity via a reciprocal regulatory loop. Dephosphorylated by ACP1.

Ubiquitinated by CHIP/STUB1. Ubiquitination is regulated by the HSP90 chaperone and regulates the receptor stability and activity through proteasomal degradation. ANKS1A prevents ubiquitination and degradation.

DISEASE:

Genetic variations in EPHA2 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 EPHA2 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.

Note=Overexpressed in several cancer types and promotes malignancy.

Similarity:

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.

SWISS:

P29317

Gene ID:

1969

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

产品图片