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Rabbit Anti-phospho-EPH A3+A4+A5 (Tyr779)/Cy5 Conjugated antibody

SL7555R-Cy5

Product Name	Anti-phospho-EPH A3+A4+A5 (Tyr779)/Cy5
Chinese Name	Cy5 标记的磷酸化 endothelial cells 受体蛋白酪氨酸激酶 A3+A4+A5 抗体
Alias	EPH A3+A4+A5 (phospho Y779 + Y779 + Y833); EPH A3+A4+A5 (phospho Y779); p-EPH A3+A4+A5 (phospho Y779); CEK7; EHK 1; EHK1; EK4; EK7; EK8; EPH homology kinase 1; EPH like kinase 4; EPH like kinase 7; EPH like kinase 8; Eph like tyrosine kinase 1; EPH receptor A3; EPH receptor A4; EPH receptor A5; Ephrin type A receptor 3; Ephrin type A receptor 4; Ephrin type A receptor 5; ETK; ETK1; HEK; HEK4; HEK7; HEK8; Human embryo kinase 1; Receptor protein tyrosine kinase HEK7; Receptor protein tyrosine kinase HEK8; SEK; TYRO1; TYRO1 protein tyrosine kinase; TYRO4; TYRO4 protein tyrosine kinase; Tyrosine protein kinase receptor EHK 1; Tyrosine protein kinase receptor ETK1; Tyrosine protein kinase receptor SEK; Tyrosine protein kinase TYRO1; EPHA3_HUMAN; EPHA4_HUMAN; EPHA5_HUMAN.
Product Type	Phosphorylated anti
Research Area	Cell biology Neurobiology Signal transduction Kinases and Phosphatases The cell membrane 受体
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human Mouse Rat(predicted:Chicken Dog Pig Cow Horse Rabbit)
Applications	IF=1:50-200 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	108kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthesised phosphopeptide derived from human around the phosphorylation site of EPH 3 Tyr779
Lsotype	IgG
Purification	affinity purified by Protein A

Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** EphA3 is a member of the Ephrin (Eph) family. The Ephrins and Eph-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, especially in the nervous system and in erythropoiesis. Based on their structures and sequence relationships, ephrins are divided into the Ephrin A (EphA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the Ephrin B (EphB) class, which are transmembrane proteins. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. **Function:** Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin 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. Highly promiscuous for ephrin-A ligands it binds preferentially EFNA5. Upon activation by EFNA5 regulates cell-cell adhesion, cytoskeletal organization and cell migration. Plays a role in cardiac cells migration and differentiation and regulates the formation of the atrioventricular canal and septum during development probably through activation by EFNA1. Involved in the retinotectal mapping of neurons. May also control the segregation but not the guidance of motor and sensory axons during neuromuscular circuit development. **Subunit:** Heterotetramer upon binding of the ligand. The heterotetramer is composed of an ephrin dimer and a receptor dimer. Oligomerization is probably required to induce biological responses. Forms a ternary EFNA5-EPHA3-ADAM10 complex mediating EFNA5 extracellular domain shedding by ADAM10 which regulates the EFNA5-EPHA3 complex internalization and function. Interacts with NCK1 (via SH2 domain); mediates EFNA5-EPHA3 signaling (By similarity). Interacts (phosphorylated) with PTPN1; dephosphorylates EPHA3 and may regulate its trafficking and function. Interacts (phosphorylated) with CRK; mediates EFNA5-EPHA3 signaling through RHOA GTPase activation.

Subcellular Location:
Isoform 1: Cell membrane; Single-pass type I membrane protein.
Isoform 2: Secreted.

Tissue Specificity:
Widely expressed. Highest level in placenta.

Post-translational modifications:
Autophosphorylates upon activation by EFNA5. Phosphorylation on Tyr-602 mediates interaction with NCK1. Dephosphorylated by PTPN1.

DISEASE:
Defects in EPHA3 may be a cause of colorectal cancer (CRC) [MIM:114500].

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.

Database links:

Entrez Gene: 2042 Human

Entrez Gene: 2043 Human

Entrez Gene: 2044 Human

Entrez Gene: 13837 Mouse

Entrez Gene: 13838 Mouse

Entrez Gene: 13839 Mouse

Entrez Gene: 29210 Rat

Entrez Gene: 316539 Rat

Entrez Gene: 79208 Rat

Omim: 179611 Human

Omim: 600004 Human

Omim: 602188 Human

SwissProt: P29320 Human

SwissProt: P54756 Human

SwissProt: P54764 Human

SwissProt: P29319 Mouse

SwissProt: Q03137 Mouse

SwissProt: Q60629 Mouse

SwissProt: O08680 Rat

SwissProt: P54757 Rat

Unigene: 123642 Human

Unigene: 371218 Human

Unigene: 654492 Human

Unigene: 137991 Mouse

Unigene: 1977 Mouse

Unigene: 400747 Mouse

Unigene: 10713 Rat

Unigene: 24569 Rat

Unigene: 6202 Rat

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