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SL7555R

Product Name:	$\mathbf{p}_{\mathbf{h}} = \mathbf{p}_{\mathbf{h}} $
	phospho-EPH A3+A4+A5 (Tyr779)
Chinese Name:	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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	108kDa
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human around the
	phosphorylation site of EPH 3 Tyr779:AA(p-Y)TT
Lsotype:	IgG
Purification:	affinity purified by Protein A



Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% 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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	 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. joiotech.

SWISS: P29320

Gene ID: 2042

Database links:

Entrez Gene: 2042Human

Entrez Gene: 2043Human

Entrez Gene: 2044Human

Entrez Gene: 13837Mouse

Entrez Gene: 13838Mouse

Entrez Gene: 13839Mouse

Entrez Gene: 29210Rat

Entrez Gene: 316539Rat

Entrez Gene: 79208Rat

Omim: 179611Human

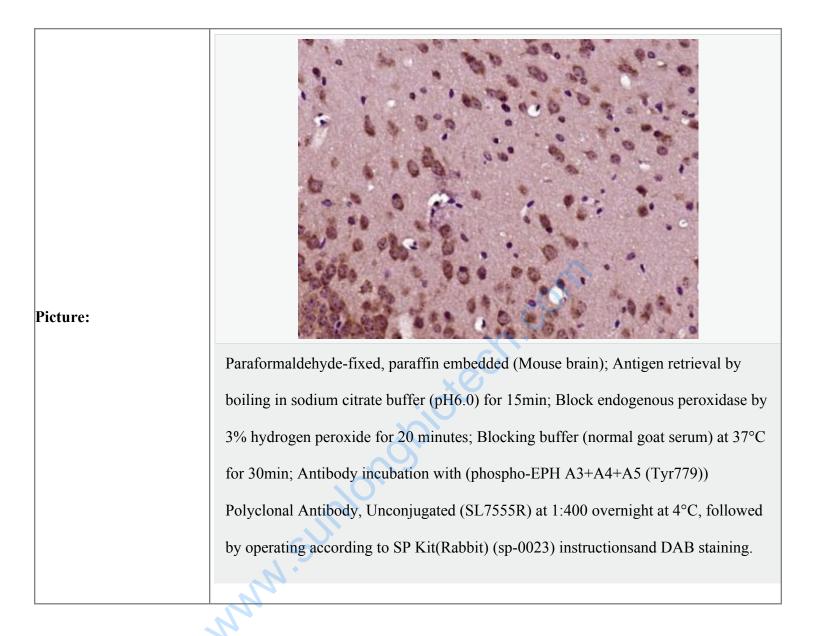
Omim: 600004Human

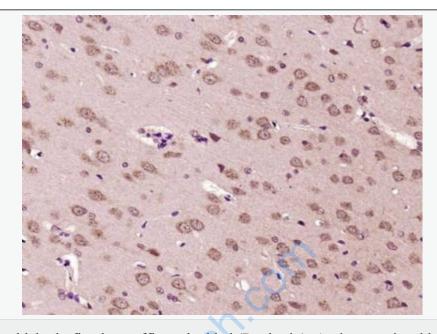
Omim: 602188Human

SwissProt: P29320Human

SwissProt: P54756Human

SwissProt: P54764Human SwissProt: P29319Mouse SwissProt: Q03137Mouse SwissProt: Q60629Mouse SwissProt: 008680Rat SwissProt: P54757Rat Unigene: 123642Human obiotech.com Unigene: 371218Human Unigene: 654492Human Unigene: 137991Mouse Unigene: 1977Mouse Unigene: 400747Mouse Unigene: 10713Rat Unigene: 24569Rat Unigene: 6202Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.





Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-EPH A3+A4+A5 (Tyr779)) Polyclonal Antibody, Unconjugated (SL7555R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.