Anti-Phospho-EPHA4 (Tyr596) Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P011600

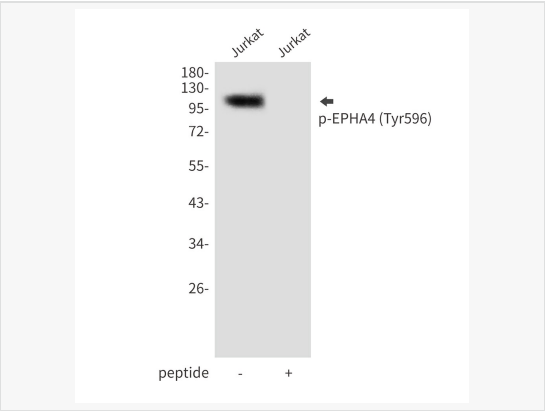
Product Information

Application	WB, ELISA
Reactivity	Human
Dilution	WB 1:500~1:1,000
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Synthetic peptide of human EPHA4
Format	Buffer System: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3. Purification: Affinity Purified.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-EPHA4 (Tyr596) antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	HEK8, SEK, TYRO1, Ephrin type-A receptor 4.
Calculated MW	Calculated MW: 110 kDa; Observed MW: 110 kDa
Uniprot ID	P54764
Gene ID	2043
Background	Receptor tyrosine kinase which binds 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, it has the unique property among Eph receptors to bind and to be physiologically activated by both GPI-anchored ephrin-A and transmembrane ephrin-B ligands including EFNA1 and EFNB3. Upon activation by ephrin ligands, modulates cell morphology and integrin-dependent cell adhesion through regulation of the Rac, Rap and Rho GTPases activity. Plays an important role in the development of the nervous system controlling different steps of axonal guidance including the establishment of the corticospinal projections. May also control the segregation of motor and sensory axons during neuromuscular circuit development. In addition to its role in axonal guidance plays a role in synaptic plasticity. Activated by EFNA1 phosphorylates CDK5 at 'Tyr-15' which in turn phosphorylates NGEF regulating RHOA and dendritic spine morphogenesis. In the nervous system, plays also a role in repair after injury preventing axonal regeneration and in angiogenesis playing a role in central nervous system vascular formation. Additionally, its promiscuity makes it available to participate in a variety of cell-cell signaling regulating for instance the development of the thymic epithelium. During development of the cochlear organ of Corti, regulates pillar cell separation by forming a ternary complex with ADAM10 and CADH1 which facilitates the cleavage of CADH1 by ADAM10 and disruption of adherens junctions (By similarity).

Validation Images



Western blot analysis of Phospho-EPHA4 (Tyr596) in Jurkat lysates using Phospho-EPHA4 (Tyr596) antibody.