ARG55774
anti-EphA4 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes EphA4
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	EphA4
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 383-417 (Center) of Human EphA4.
Conjugation	Un-conjugated
Alternate Names	EC 2.7.10.1; Tyrosine-protein kinase receptor SEK; HEK8; SEK; hEK8; Tyrosine-protein kinase TYRO1; Ephrin type-A receptor 4; EK8; EPH-like kinase 8; TYRO1

Application Instructions

Application table

Application	Dilution
IHC-P	1:25
WB	1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: HeLa

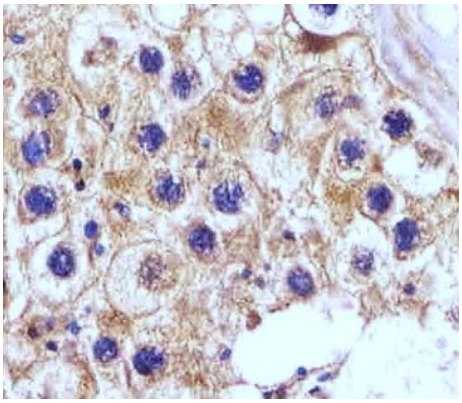
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) sodium azide.
Preservative	0.09% (W/V) sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 13838 Mouse GeneID: 2043 Human Swiss-port # P54764 Human Swiss-port # Q03137 Mouse
Gene Symbol	EPHA4
Gene Full Name	EPH receptor A4
Background	This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. 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. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2015]
Function	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. [UniProt]
Calculated Mw	110 kDa
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Cell projection, axon. Cell projection, dendrite. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Early endosome Note=Clustered upon activation and targeted to early endosome

Images



ARG55774 anti-EphA4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human testis tissue stained with ARG55774 anti-EphA4 antibody at 1:25 dilution.

ARG55774 anti-EphA4 antibody WB image

Western blot: 20 µg of HeLa cell lysate stained with ARG55774 anti-EphA4 antibody at 1:1000 dilution.