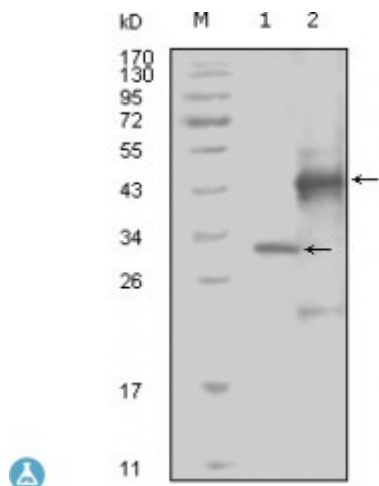


Anti-EphA4 antibody



Description	Mouse monoclonal to EphA4.
Model	STJ98026
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant fragment of EphA4 (aa777-986) expressed in E. Coli.
Immunogen Region	777-986aa
Gene ID	2043
Gene Symbol	EPHA4
Dilution range	WB 1:500-1:2000ELISA 1:10000
Specificity	EphA4 Monoclonal Antibody detects endogenous levels of EphA4 protein.
Tissue Specificity	Ubiquitous.
Purification	Affinity purification
Clone ID	7D3D4
Note	For Research Use Only (RUO).
Protein Name	Ephrin type-A receptor 4 EPH-like kinase 8 EK8 hEK8 Tyrosine-protein kinase TYRO1 Tyrosine-protein kinase receptor SEK
Clonality	Monoclonal
Conjugation	Unconjugated

Isotype	IgG1
Formulation	Ascitic fluid containing 0.03% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3388OMIM:602188
Alternative Names	Ephrin type-A receptor 4 EPH-like kinase 8 EK8 hEK8 Tyrosine-protein kinase TYRO1 Tyrosine-protein kinase receptor SEK
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.
Sequence and Domain Family	The protein kinase domain mediates interaction with NGEF.
Cellular Localization	Cell membrane Cell projection, axon Cell projection, dendrite Cell junction, synapse, postsynaptic cell membrane, postsynaptic density Early endosome. Clustered upon activation and targeted to early endosome.