Anti-EphB1/2/3 antibody

Description	Rabbit polyclonal to EphB1/2/3.

Model	STJ92949
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF, IHC
Immunogen	Synthesized peptide derived from human EphB1/2/3
Immunogen Region	600-680 aa, Internal
Gene ID	2047
Gene Symbol	EPHB1
Dilution range	IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	EphB1/2/3 Polyclonal Antibody detects endogenous levels of EphB1/2/3 protein.
Tissue Specificity	Preferentially expressed in brain.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Ephrin type-B receptor 1 ELK EPH tyrosine kinase 2 EPH-like kinase 6 EK6 hEK6 Neuronally-expressed EPH-related tyrosine kinase NET Tyrosine-protein kinase receptor EPH-2
Molecular Weight	109.885 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3392OMIM:600600
Alternative Names	Ephrin type-B receptor 1 ELK EPH tyrosine kinase 2 EPH-like kinase 6 EK6 hEK6 Neuronally-expressed EPH-related tyrosine kinase NET Tyrosine-protein kinase receptor EPH-2
Function	Receptor tyrosine kinase which binds promiscuously transmembrane ephrin-B 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. Cognate/functional ephrin ligands for this receptor include EFNB1, EFNB2 and EFNB3. During nervous system development, regulates retinal axon guidance redirecting ipsilaterally ventrotemporal retinal ganglion cells axons at the optic chiasm midline. This probably requires repulsive interaction with EFNB2. In the adult nervous system together with EFNB3, regulates chemotaxis, proliferation and polarity of the hippocampus neural progenitors. In addition to its role in axon guidance plays also an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and synapse formation. May also regulate angiogenesis. More generally, may play a role in targeted cell migration and adhesion. Upon activation by EFNB1 and probably other ephrin-B ligands activates the MAPK/ERK and the JNK signaling cascades to regulate cell migration and adhesion respectively. Involved in the maintenance of the pool of satellite cells (muscle stem cells) by promoting their self-renewal and reducing their activation and differentiation .
Cellular Localization	Cell membrane Early endosome membrane Cell projection, dendrite
Post-translational Modifications	Phosphorylated. Autophosphorylation is stimulated by the ligand EFNB1. Required for interaction with SH2 domain-containing interactors, for activation of the MAPK/ERK and JUN signaling cascades and for ubiquitination by CBL. Ubiquitinated; (EFNB1)ligand-induced poly- and/or multi-ubiquitination by CBL is regulated by SRC and leads to lysosomal degradation.