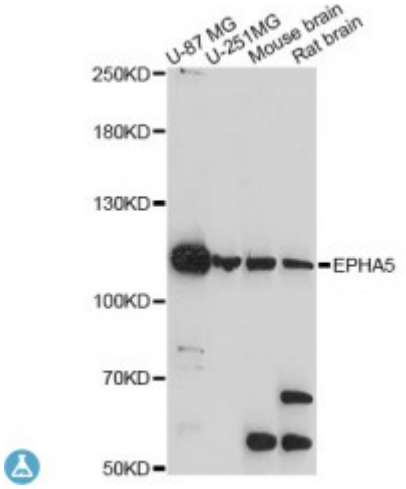
Anti-EPHA5 Antibody



Description	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. Alternatively spliced transcript variants encoding different isoforms have been described.

Model	STJ116451
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-130 of human EPHA5 (NP_004430.4).
Gene ID	2044
Gene Symbol	EPHA5
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Almost exclusively expressed in the nervous system in cortical neurons, cerebellar Purkinje cells and pyramidal neurons within the cortex and hippocampus, Display an increasing gradient of expression from the forebrain to hindbrain and spinal cord
Purification	Affinity purification

Note	For Research Use Only (RUO).
Protein Name	Ephrin type-A receptor 5
Molecular Weight	114.803 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:3389OMIM:600004Reactome:R-HSA-2682334
Alternative Names	Ephrin type-A receptor 5
Function	Receptor tyrosine kinase which binds promiscuously GPI-anchored ephrin-A 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, Among GPI-anchored ephrin-A ligands, EFNA5 most probably constitutes the cognate/functional ligand for EPHA5, Functions as an axon guidance molecule during development and may be involved in the development of the retinotectal, entorhino-hippocampal and hippocamposeptal pathways, Together with EFNA5 plays also a role in synaptic plasticity in adult brain through regulation of synaptogenesis, In addition to its function in the nervous system, the interaction of EPHA5 with EFNA5 mediates communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion ,
Cellular Localization	Cell membrane
Post-translational Modifications	Phosphorylated, Phosphorylation is stimulated by the ligand EFNA5, Dephosphorylation upon stimulation by glucose, inhibits EPHA5 forward signaling and results in insulin secretion ,