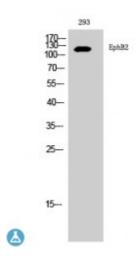


## Anti-EphB2 antibody



**Description** Rabbit polyclonal to EphB2.

Model STJ92951

**Host** Rabbit

**Reactivity** Human

**Applications** ELISA, IHC, WB

**Immunogen** Synthesized peptide derived from human EphB2

**Immunogen Region** 960-1040 aa, C-terminal

**Gene ID** <u>2048</u>

Gene Symbol EPHB2

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300ELISA 1:5000

**Specificity** EphB2 Polyclonal Antibody detects endogenous levels of EphB2 protein.

**Tissue Specificity** Brain, heart, lung, kidney, placenta, pancreas, liver and skeletal muscle.

Preferentially expressed in fetal 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 2 Developmentally-regulated Eph-related tyrosine

kinase ELK-related tyrosine kinase EPH tyrosine kinase 3 EPH-like kinase 5

EK5 hEK5 Renal carcinoma antigen NY-REN-47 Tyrosine-protein

Molecular Weight 117 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:3393OMIM:176807

**Alternative Names** Ephrin type-B receptor 2 Developmentally-regulated Eph-related tyrosine

kinase ELK-related tyrosine kinase EPH tyrosine kinase 3 EPH-like kinase 5  $\,$ 

EK5 hEK5 Renal carcinoma antigen NY-REN-47 Tyrosine-protein

**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. Functions in axon guidance during development. Involved in the

guidance of commissural axons, that form a major interhemispheric

connection between the 2 temporal lobes of the cerebral cortex. Also involved in guidance of contralateral inner ear efferent growth cones at the midline and of retinal ganglion cell axons to the optic disk. In addition to axon guidance, also regulates dendritic spines development and maturation and stimulates the formation of excitatory synapses. Upon activation by EFNB1, abolishes the ARHGEF15-mediated negative regulation on excitatory synapse formation.

Controls other aspects of development including angiogenesis, palate development and in inner ear development through regulation of endolymph production. Forward and reverse signaling through the EFNB2/EPHB2

complex regulate movement and adhesion of cells that tubularize the urethra

and septate the cloaca. May function as a tumor suppressor.

**Cellular Localization** Cell membrane. Single-pass type I membrane protein. Cell projection, axon

Cell projection, dendrite

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