

**EphB2 Polyclonal Antibody**  
**Catalog # AP69769****Specification**

---

**EphB2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P29323</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**EphB2 Polyclonal Antibody - Additional Information****Gene ID** 2048**Other Names**

EPHB2; DRT; EPHT3; EPTH3; ERK; HEK5; TYRO5; 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

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.  
IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**EphB2 Polyclonal Antibody - Protein Information****Name** EPHB2**Synonyms** DRT, EPHT3, EPTH3, ERK, HEK5, TYRO5**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 EFN1, abolishes the ARHGAP15-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. May be involved in the regulation of platelet activation and blood coagulation (PubMed:<a href="http://www.uniprot.org/citations/30213874" target="\_blank">30213874</a>).

#### Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell projection, axon. Cell projection, dendrite

#### Tissue Location

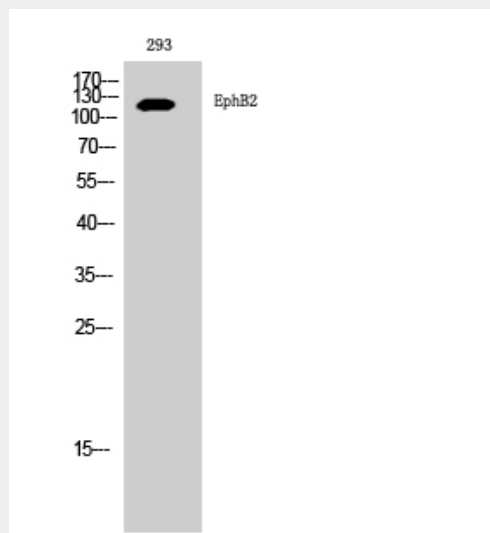
Brain, heart, lung, kidney, placenta, pancreas, liver and skeletal muscle. Preferentially expressed in fetal brain

### EphB2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### EphB2 Polyclonal Antibody - Images



Western Blot analysis of 293 cells using EphB2 Polyclonal Antibody diluted at 1:1000

### EphB2 Polyclonal Antibody - Background

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 EFN1, abolishes the ARHGAP15-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 EFN2/EPH2 complex regulate movement and adhesion of cells that tubularize the urethra and septate the cloaca. May function as a tumor suppressor.