

**EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS13146****Specification**

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**EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - Product Information**

Application	IHC
Primary Accession	<a href="#">P54753</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	110kDa KDa

**EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - Additional Information****Gene ID** 2049**Other Names**

Ephrin type-B receptor 3, 2.7.10.1, EPH-like tyrosine kinase 2, EPH-like kinase 2, Embryonic kinase 2, EK2, hEK2, Tyrosine-protein kinase TYRO6, EPHB3, ETK2, HEK2, TYRO6

**Target/Specificity**

Human EPHB3

**Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) is for research use only and not for use in diagnostic or therapeutic procedures.

**EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - Protein Information****Name** EPHB3**Synonyms** ETK2, HEK2, TYRO6**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. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons forming the corpus callosum and the anterior commissure, 2 major interhemispheric connections between the temporal lobes of the cerebral cortex. In addition to its role in axon guidance also plays an important redundant role with other ephrin-B receptors in development and maturation of dendritic spines and the formation of excitatory synapses. Controls other aspects of development through regulation of cell migration

and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from differentiated cells in the crypt.

**Cellular Location**

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

**Tissue Location**

Ubiquitous.

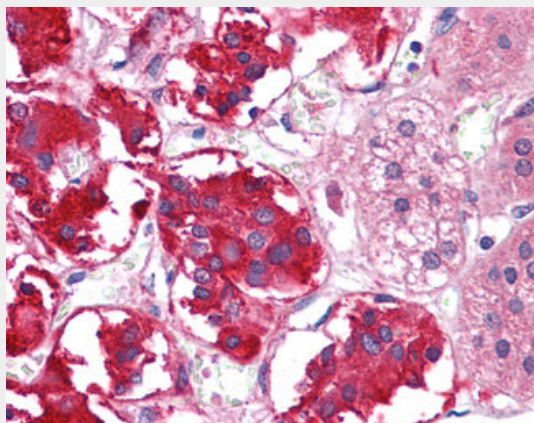
**Volume**

50  $\mu$ l

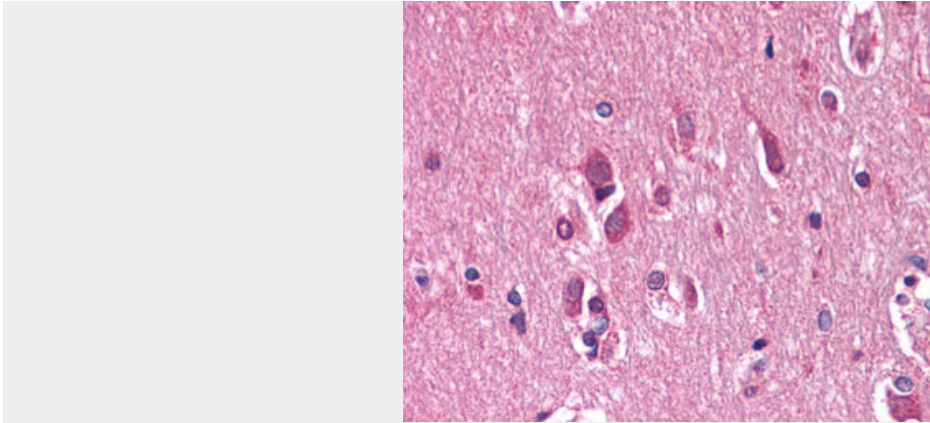
**EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - Protocols**

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](#)

**EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - Images**

Anti-EPHB3 antibody IHC of human adrenal.



Anti-EPHB3 antibody IHC of human brain, cortex.

### **EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - 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. Generally has an overlapping and redundant function with EPHB2. Like EPHB2, functions in axon guidance during development regulating for instance the neurons forming the corpus callosum and the anterior commissure, 2 major interhemispheric connections between the temporal lobes of the cerebral cortex. 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 the formation of excitatory synapses. Controls other aspects of development through regulation of cell migration and positioning. This includes angiogenesis, palate development and thymic epithelium development for instance. Forward and reverse signaling through the EFNB2/EPHB3 complex also regulate migration and adhesion of cells that tubularize the urethra and septate the cloaca. Finally, plays an important role in intestinal epithelium differentiation segregating progenitor from differentiated cells in the crypt.

### **EPHB3 / EPH Receptor B3 Antibody (clone 4A122D1) - References**

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Greenman C.,et al.Nature 446:153-158(2007).