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# EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5)

**Mouse Monoclonal Antibody**
**Catalog # ALS13051**

## Specification

### EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - Product Information

| | |
|---|---|
| Application | **IF, IHC** |
| Primary Accession | P54760 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Calculated MW | **108kDa KDa** |

### EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - Additional Information

**Gene ID** 2050

**Other Names**
Ephrin type-B receptor 4, 2.7.10.1, Hepatoma transmembrane kinase, Tyrosine-protein kinase TYRO11, EPHB4, HTK, MYK1, TYRO11

**Target/Specificity**
Human EPHB4

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

**Precautions**
EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) is for research use only and not for use in diagnostic or therapeutic procedures.

### EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - Protein Information

**Name** EPHB4

**Synonyms** HTK, MYK1, TYRO11

**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. Together with its cognate ligand/functional ligand EFNB2 it is involved in the regulation of cell adhesion and migration, and plays a central role in heart morphogenesis, angiogenesis and blood vessel remodeling and permeability. EPHB4-mediated forward signaling controls cellular repulsion and segregation from EFNB2-expressing cells.

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

**Tissue Location**
Abundantly expressed in placenta but also detected in kidney, liver, lung, pancreas, skeletal muscle and heart. Expressed in primitive and myeloid, but not lymphoid, hematopoietic cells. Also observed in cell lines derived from liver, breast, colon, lung, melanocyte and cervix.

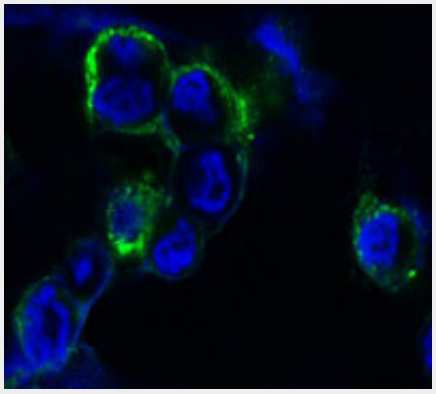
**Volume**
50 µl

## EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - Protocols

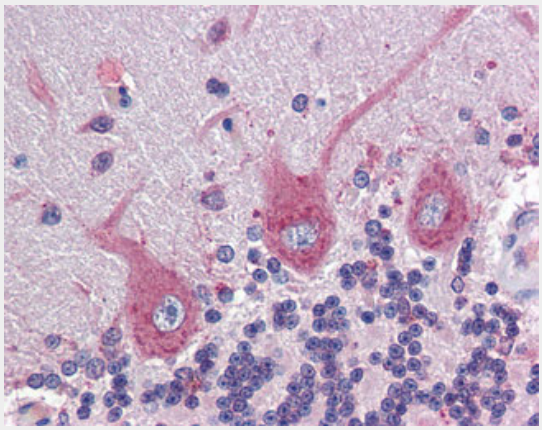
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - Images



Confocal immunofluorescence of methanol-fixed HEK293 cells transfected with EphB4-hIgGFc using...



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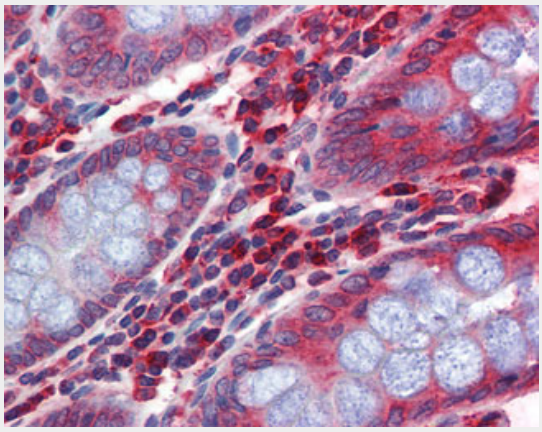
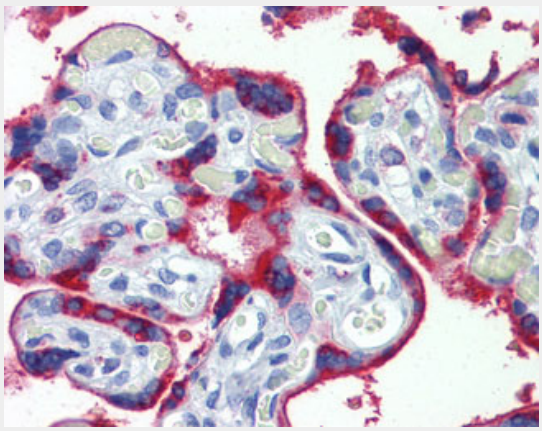
Anti-EPHB4 antibody IHC of human brain, cerebellum.



Anti-EPHB4 antibody IHC of human colon.



Anti-EPHB4 antibody IHC of human placenta.

**EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - 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. Together with its cognate ligand/functional ligand EFNB2 plays a central role in heart morphogenesis and angiogenesis through regulation of cell adhesion and cell migration. EPHB4- mediated forward signaling controls cellular repulsion and segregation form EFNB2-expressing cells. Plays also a role in postnatal blood vessel remodeling, morphogenesis and permeability and is thus important in the context of tumor angiogenesis.

**EPHB4 / EPH Receptor B4 Antibody (Extracellular, clone 5B5) - References**

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Wilson M.D.,et al.Nucleic Acids Res. 29:1352-1365(2001).
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Fueller T.,et al.J. Cell Sci. 116:2461-2470(2003).
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