

**EPHB4 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1275a****Specification**

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**EPHB4 Antibody - Product Information**

Application	<b>WB, IF, IHC</b>
Primary Accession	<a href="#">P54760</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>108kDa KDa</b>

**Description**

EphB4: EPH receptor B4, also known as Htk, Myk1, Tyro11. Entrez Protein: NP\_004435. It is a member of the Eph receptor family, which bind the ephrin ligand family. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. The EphB4 protein binds to ephrin-B2 and plays an essential role in vascular development.

**Immunogen**

Purified recombinant extracellular fragment of human EPHB4 fused with hlgGfc tag expressed in HEK293 cell line. <br />

**Formulation**

Ascitic fluid containing 0.03% sodium azide. <br />

**EPHB4 Antibody - 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

**Dilution**

WB~~1/500 - 1/2000

IF~~1/200 - 1/1000

IHC~~1:200~~1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

EPHB4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## EPHB4 Antibody - 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.

## EPHB4 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](#)

## EPHB4 Antibody - Images



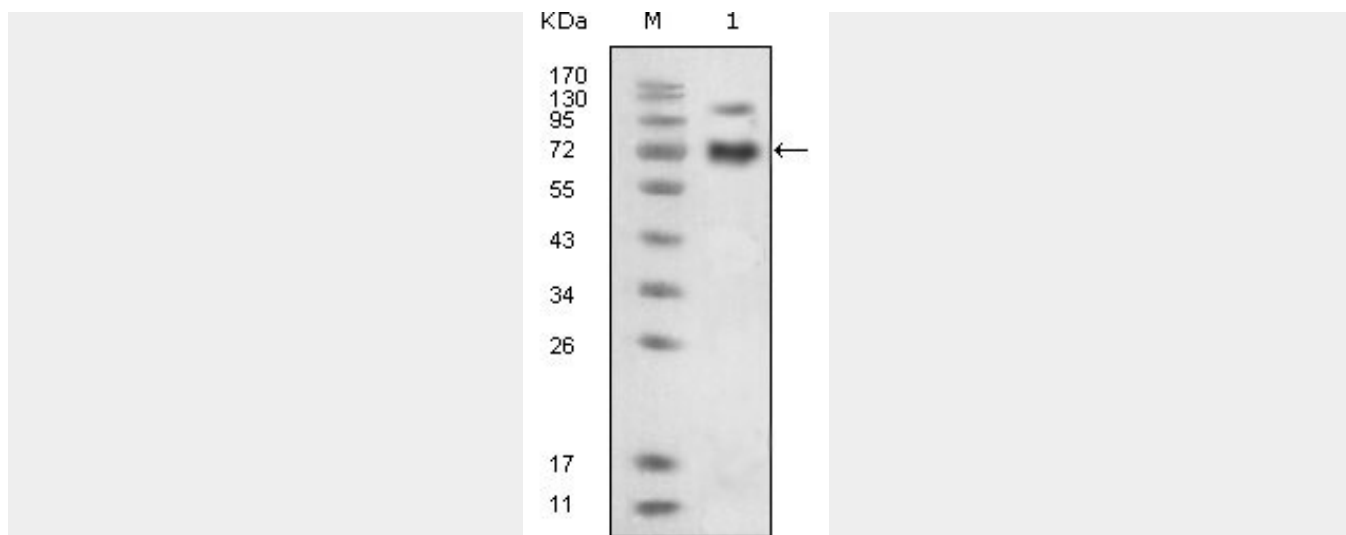


Figure 1: Western blot analysis using EphB4 mouse mAb against extracellular domain of human EphB4 (aa16-539).

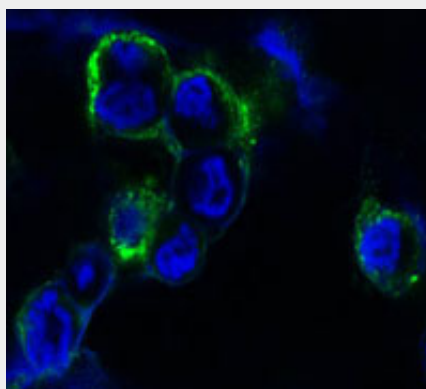


Figure 2: Confocal immunofluorescence analysis of methanol-fixed HEK293 cells trasfected with EphB4-hlgGfc using EphB4 mouse mAb (green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.

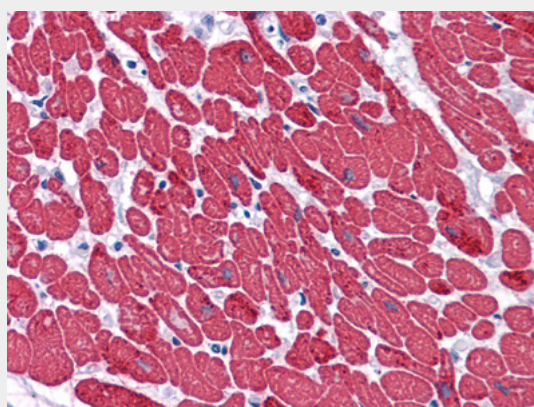


Figure 2: Immunohistochemical analysis of paraffin-embedded human Heart tissues using MYL3 mouse mAb.

**EPHB4 Antibody - References**

1. Br J Cancer. 2007 Apr 10;96(7):1083-91.
2. Dig Liver Dis. 2007 Aug;39(8):725-32.