

## **EphB4 Monoclonal Antibody**

Catalog No: YM0232

Reactivity: Human

**Applications:** WB;IHC;IF;ELISA

Target: EphB4

Fields: >>Axon guidance

Gene Name: EPHB4

**Protein Name:** Ephrin type-B receptor 4

Human Gene Id: 2050

**Human Swiss Prot** 

P54760

P54761

No:

**Mouse Swiss Prot** 

No:

Immunogen: Purified recombinant fragment of EphB4 expressed in E. Coli.

**Specificity:** EphB4 Monoclonal Antibody detects endogenous levels of EphB4 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution :** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 108kD

**Cell Pathway:** Axon guidance;

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#### P References:

1. J. Chrencik, A. Brooun, M. Recht. Structure. 2006 Feb;14(2):321-30.

2. Qinghua WU, Zhenhe SUO, Bjon RISBERG. Pathol Oncol Res.

2004;10(1):26-33.

#### **Background:**

Ephrin receptors and their ligands, the ephrins, mediate numerous developmental processes, particularly in the nervous system. 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. The Eph family of receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. The protein encoded by this gene binds to ephrin-B2 and plays an essential role in vascular development. [provided by RefSeq, Jul 2008],

#### **Function:**

catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Receptor for members of the ephrin-B family. Binds to ephrin-B2. May have a role in events mediating differentiation and development.,PTM:Autophosphorylated.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 SAM (sterile alpha motif) domain.,similarity:Contains 2 fibronectin type-III domains.,tissue specificity:Abundantly expressed in placenta and in a range of primary tissues and malignant cell lines. Expressed in fetal, but not adult, brain, and in primitive and myeloid, but not lymphoid, hematopoietic cells.,

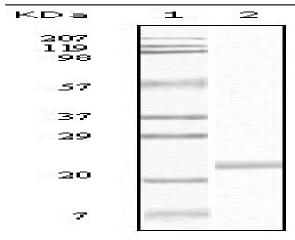
# Subcellular Location:

Cell membrane; Single-pass type I membrane protein.

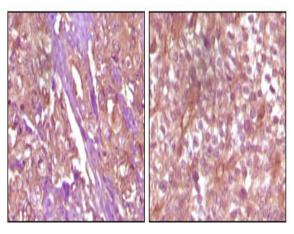
### **Expression:**

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.

## **Products Images**



Western Blot analysis using EphB4 Monoclonal Antibody against truncated EphB4 recombinant protein.



Immunohistochemistry analysis of paraffin-embedded Human pancreas carcinoma (left) and breast carcinoma (right) tissue, showing membrane and cytoplasmic (pancreas carcinoma) localization, membrane (breast carcinoma) localization with DAB staining using Ep