

## EphB1 Monoclonal Antibody

<b>Catalog No :</b>	YM0229
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	EphB1
<b>Fields :</b>	>>Axon guidance
<b>Gene Name :</b>	EPHB1
<b>Protein Name :</b>	Ephrin type-B receptor 1
<b>Human Gene Id :</b>	2047
<b>Human Swiss Prot No :</b>	P54762
<b>Mouse Swiss Prot No :</b>	Q8CBF3
<b>Immunogen :</b>	Purified recombinant fragment of EphB1 (aa19-133) expressed in E. Coli.
<b>Specificity :</b>	EphB1 Monoclonal Antibody detects endogenous levels of EphB1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	110kD
<b>Cell Pathway :</b>	Axon guidance;

**P References :**

1. J Cell Sci. 2002 Aug 1;115(Pt 15):3073-81.
2. Proc Natl Acad Sci U S A. 2002 Jul 9;99(14):9219-24.

**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 is a receptor for ephrin-B family members. [provided by RefSeq, Jul 2008],

**Function :**

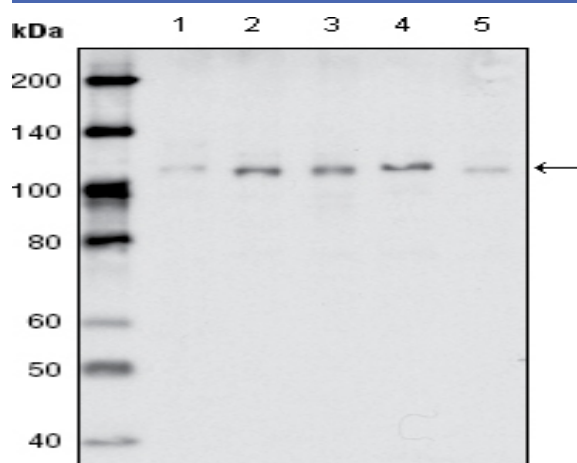
catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,function:Receptor for members of the ephrin-B family. Binds to ephrin-B1, -B2 and -B3. May be involved in cell-cell interactions in the nervous system.,similarity:Belongs to the protein kinase superfamily. Tyr protein 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.,subunit:The ligand-activated form interacts with GRB2, GRB10 and NCK through their respective SH2 domains. The GRB10 SH2 domain binds EPHB1 through Tyr-928, while GRB2 binds residues within the catalytic domain. Interacts with EPHB6. The NCK SH2 domain binds EPHB1 through Tyr-594. Interacts with PRKCABP.,tissue specificity:Preferentially expressed in brain.,

**Subcellular Location :**

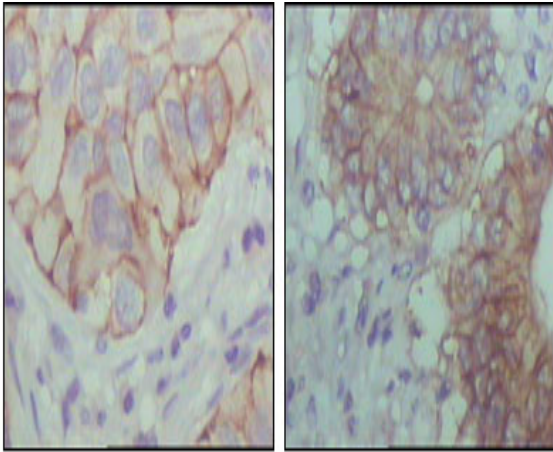
Cell membrane ; Single-pass type I membrane protein . Early endosome membrane . Cell projection, dendrite .

**Expression :**

Preferentially expressed in brain.

**Products Images**

Western Blot analysis using EphB1 Monoclonal Antibody against MDA-MB-468 (1), MDA-MB-453 (2), MCF-7 (3), T47D (4) and SKBR-3 (5) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human lung cancer (left) and colon cancer (right) showing cytoplasmic localization with DAB staining using EphB1 Monoclonal Antibody.