



# EphB1 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-13227                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Gene Name</b>                   | EPHB1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human EPHB1. AA range:841-890                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <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,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Synonyms</b>                    | EC:2.7.10.1;EK6;ELK;EPH like kinase 6;EPH receptor B1;EphB1;Ephrin type-B receptor 1;EPHT2;HEK6;NET;EPH tyrosine kinase 2;EPH-like kinase 6;Neuronally-expressed EPH-related tyrosine kinase;Tyrosine-protein kinase receptor EPH-2                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Observed Band</b>               | 120kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Calculated Molecular Weight</b> | 120kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Cell Pathway</b>                | Cell membrane ; Single-pass type I membrane protein . Early endosome membrane . Cell projection, dendrite .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Tissue Specificity</b>          | Preferentially expressed in brain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Function</b>                    | 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.,

#### 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],

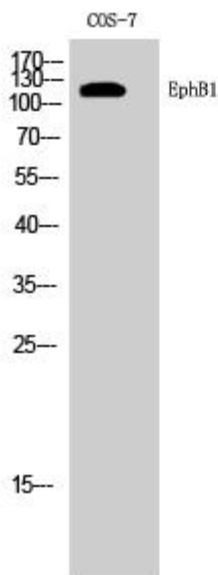
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using EphB1 Monoclonal Antibody