

## Rabbit EPHB6 Polyclonal Antibody | anti-EPHB6 antibody

Phospho-EPHB6 (Tyr645) Antibody

| CATALOG # | HOST   | REACTIVITY                                                                                                                     | APPLICATIONS                                                                       |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| AAA329907 | Rabbit | Human, Mouse, Rat<br>Predicted Reactivity: Pig (100%), Zebrafish (83%), Horse (100%), Sheep (100%), Dog (100%), Chicken (100%) | ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

EPHB6; Polyclonal Antibody; Phospho-EPHB6 (Tyr645) Antibody; Ephreceptor B6; Ephb6; EPHB6\_HUMAN; Ephrin type B receptor 6 precursor; Ephrin type-B receptor 6; HEP; MGC129910; MGC129911; Tyrosine protein kinase defective receptor Eph6; Tyrosine-protein kinase-defective receptor EPH-6; anti-EPHB6 antibody

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Reactivity                                      | Human, Mouse, Rat<br>Predicted Reactivity: Pig (100%), Zebrafish (83%), Horse (100%), Sheep (100%), Dog (100%), Chicken (100%)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Isotype                                         | Rabbit IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Specificity                                     | Phospho-EPHB6 (Tyr645) Antibody detects endogenous levels of EPHB6 only when phosphorylated at Tyr645. Tissue Specificity: Expressed in brain. Expressed in non invasive breast carcinoma cell lines (at protein level). Strong expression in brain and pancreas, and weak expression in other tissues, such as heart, placenta, lung, liver, skeletal muscle and kidney. Expressed in breast non invasive tumors but not in metastatic lesions. Isoform 3 is expressed in cell lines of glioblastomas, anaplastic astrocytomas, gliosarcomas and astrocytomas. Isoform 3 is not detected in normal tissues. |
| Purity/Purification                             | The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Form/Format                                     | Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Concentration                                   | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Applicable Applications for anti-EPHB6 antibody | ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Immunogen                                       | A synthesized peptide derived from human EPHB6 around the phosphorylation site of Tyr645.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Conjugation                                     | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Fragment                                        | Fab fragment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Post Translational Modifications                | Ligand-binding increases phosphorylation on tyrosine residues. Phosphorylation on tyrosine residues is mediated by transphosphorylation by the catalytically active EPHB1 in a ligand-independent manner. Tyrosine phosphorylation of the receptor may act as a switch on the functional transition from cell adhesion/attraction to de-adhesion/repulsion.                                                                                                                                                                                                                                                  |
| Subunit Structure                               | Interacts with CBL and EPHB1. Interacts with FYN; this interaction takes place in a ligand-independent manner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Similarity                                      | The protein kinase domain is predicted to be catalytically inactive. Its extracellular domain is capable of promoting cell adhesion and migration in response to low concentrations of ephrin-B2, but its cytoplasmic domain is essential for cell repulsion and inhibition of migration induced by high concentrations of ephrin-B2. Belongs to the protein kinase superfamily. Tyr protein kinase family. Ephrin receptor subfamily.                                                                                                                                                                       |
| Subcellular Location                            | Membrane>Single-pass type I membrane protein. Secreted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Preparation and Storage                         | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

IMAGES



Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry)

Staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of EPHB6 (Phospho-Tyr645) using HepG2 whole cell lysates.-/+ means absence or presence of N peptide¼non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-EPHB6 antibody | Kinase-defective receptor for members of the ephrin-B family. Binds to ephrin-B1 and ephrin-B2. Modulates cell adhesion and migration by exerting both positive and negative effects upon stimulation with ephrin-B2. Inhibits JNK activation, T-cell receptor-induced IL-2 secretion and CD25 expression upon stimulation with ephrin-B2. |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                            |
|----------------------------------|----------------------------------------------------------------------------|
| NCBI GI #                        | 194097332                                                                  |
| NCBI GeneID                      | 2051                                                                       |
| NCBI Accession #                 | NP_004436.2                                                                |
| NCBI GenBank Nucleotide #        | NM_004445.3                                                                |
| UniProt Accession #              | O15197; Q2TB23; Q2TB24; A4D2I7; A8CDT5; D3DXD3                             |
| Molecular Weight                 | 110,700 Da                                                                 |
| NCBI Official Full Name          | ephrin type-B receptor 6                                                   |
| NCBI Official Synonym Full Names | EPH receptor B6                                                            |
| NCBI Official Symbol             | EPHB6                                                                      |
| NCBI Official Synonym Symbols    | HEP                                                                        |
| NCBI Protein Information         | ephrin type-B receptor 6; tyrosine-protein kinase-defective receptor EPH-6 |
| UniProt Protein Name             | Ephrin type-B receptor 6                                                   |
| UniProt Gene Name                | EPHB6                                                                      |
| UniProt Entry Name               | EPHB6_HUMAN                                                                |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.