

## Rabbit anti-Mouse, Rat EphB2 Polyclonal Antibody | anti-EphB2 antibody

Anti-EphB2 Antibody, Rabbit Polyclonal

|                               |                       |                                 |                                             |
|-------------------------------|-----------------------|---------------------------------|---------------------------------------------|
| CATALOG #<br><b>AAA255065</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Mouse, Rat</b> | APPLICATIONS<br><b>Immunohistochemistry</b> |
|-------------------------------|-----------------------|---------------------------------|---------------------------------------------|

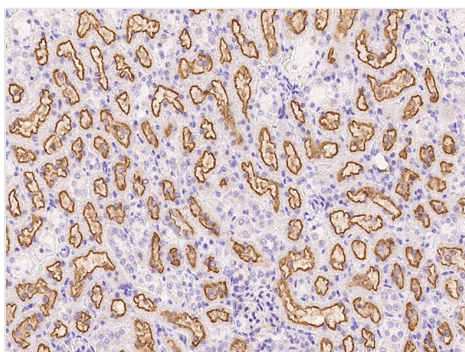
### PRODUCT SYNONYMS

EphB2; Polyclonal Antibody; Anti-EphB2 Antibody; Rabbit Polyclonal; EphB2/Eph Receptor B2 Antibody; Rabbit PAb; Antigen Affinity Purified; EPH receptor B2; Anti-Cek5 Antibody; Anti-Drt Antibody; Anti-Erk Antibody; Anti-ETECK Antibody; Anti-Hek5 Antibody; Anti-Nuk Antibody; Anti-Prkm5 Antibody; Anti-Qek5 Antibody; Anti-Sek3 Antibody; Anti-Tyro5 Antibody; anti-EphB2 antibody

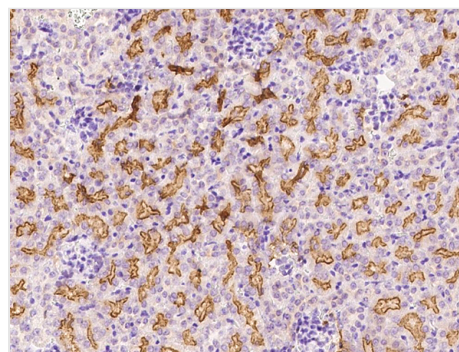
### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                       |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                |
| Reactivity                                      | Mouse, Rat                                                                                                                                                                                                                                                            |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                            |
| Isotype                                         | Rabbit IgG                                                                                                                                                                                                                                                            |
| Specificity                                     | Mouse EphB2                                                                                                                                                                                                                                                           |
| Purity/Purification                             | Protein A & Antigen Affinity                                                                                                                                                                                                                                          |
| Form/Format                                     | Liquid; 0.2um filtered solution in PBS                                                                                                                                                                                                                                |
| Applicable Applications for anti-EphB2 antibody | IHC (Immunohistochemistry)                                                                                                                                                                                                                                            |
| Immunogen                                       | A synthetic peptide corresponding to the center region of the Mouse EphB2/Eph Receptor B2                                                                                                                                                                             |
| Conjugation                                     | Unconjugated                                                                                                                                                                                                                                                          |
| Preparation                                     | Produced in rabbits immunized with a synthetic peptide corresponding to the center region of the Mouse EphB2/Eph Receptor B2, and purified by antigen affinity chromatography.                                                                                        |
| Preparation and Storage                         | This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. |

### IMAGES


**IHC (Immunohistochemistry)**

Immunochemical staining EPHB2 in rat kidney with rabbit polyclonal antibody at 1:1000 dilution, formalin-fixed paraffin embedded sections.


**IHC (Immunohistochemistry)**

Immunochemical staining EPHB2 in mouse kidney with rabbit polyclonal antibody at 1:1000 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-EphB2 antibody | Ephrin type-B receptor 2, also known as EphB2, belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family which 16 known receptors (14 found in mammals) are involved: EPHA1, EPHA2, EPHA3, EPHA4, EPHA5, EPHA6, EPHA7, EPHA8, EPHA9, EPHA10, EPHB1, EPHB2, EPHB3, EPHB4, EPHB5, EPHB6. EphB2 receptor tyrosine kinase phosphorylates syndecan-2 and that this phosphorylation event is crucial for syndecan-2 clustering and spine formation. The Eph family of receptor tyrosine kinases (comprising EphA and EphB receptors) has been implicated in synapse formation and the regulation of synaptic function and plasticity6. Ephrin receptors are components of cell signalling pathways involved in animal growth and development, forming the largest sub-family of receptor tyrosine kinases (RTKs). Ligand-mediated activation of Ephs induces various important downstream effects and Eph receptors have been studied for their potential roles in the development of cancer. EphB receptor tyrosine kinases are enriched at synapses, suggesting that these receptors play a role in synapse formation or function. We find that EphrinB binding to EphB induces a direct interaction of EphB with NMDA-type glutamate receptors. This interaction occurs at the cell surface and is mediated by the extracellular regions of the two receptors, but does not require the kinase activity of EphB. |
| Product Categories/Family for anti-EphB2 antibody   | Actin Dynamics Signaling Pathway                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| References                                          | Zisch AH, et al. (1998) Complex formation between EphB2 and Src requires phosphorylation of tyrosine 611 in the EphB2 juxtamembrane region. Oncogene. 16 (20): 2657-70.Yu HH, et al. (2001) Multiple signaling interactions of Abl and Arg kinases with the EphB2 receptor. Oncogene. 20 (30): 3995-4006.Zisch AH, et al. (2000) Replacing two conserved tyrosines of the EphB2 receptor with glutamic acid prevents binding of SH2 domains without abrogating kinase activity and biological responses. Oncogene. 19 (2): 177-87.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 47777351                                                                                                                                              |
| NCBI GeneID                      | 13844                                                                                                                                                 |
| NCBI Accession #                 | NP_034272                                                                                                                                             |
| NCBI GenBank Nucleotide #        | NM_010142.2                                                                                                                                           |
| UniProt Accession #              | P54763; Q62213; Q9QVY4                                                                                                                                |
| Molecular Weight                 | 110,760 Da                                                                                                                                            |
| NCBI Official Full Name          | ephrin type-B receptor 2                                                                                                                              |
| NCBI Official Synonym Full Names | Eph receptor B2                                                                                                                                       |
| NCBI Official Symbol             | Ephb2                                                                                                                                                 |
| NCBI Official Synonym Symbols    | Drt; Erk; Nuk; Cek5; Hek5; Qek5; Sek3; ETECK; Prkm5; Tyro5                                                                                            |
| NCBI Protein Information         | ephrin type-B receptor 2; neural kinase; nuk receptor tyrosine kinase; tyrosine-protein kinase receptor EPH-3; tyrosine-protein kinase receptor SEK-3 |
| UniProt Protein Name             | Ephrin type-B receptor 2                                                                                                                              |
| UniProt Gene Name                | Ephb2                                                                                                                                                 |
| UniProt Synonym Gene Names       | Epth3; Nuk; Sek3                                                                                                                                      |
| UniProt Entry Name               | EPHB2_MOUSE                                                                                                                                           |

**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.