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Phospho-Tyr331 EphrinB Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1087

Specification

Phospho-Tyr331 EphrinB Antibody - Product Information

Application	**WB**
Primary Accession	P28693
Reactivity	**Rat**
Predicted	**Bovine, Chicken, Human, Mouse, Xenopus, Zebrafish**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**46 KDa**

Phospho-Tyr331 EphrinB Antibody - Additional Information

Gene ID	**396513**
Gene Name	**EPHB2**

Other Names
Ephrin type-B receptor 2, EPH-like kinase 5, EK5, cEK5, EPHB2, CEK5

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyr331 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity
Specific for the ~46k EphrinB protein phosphorylated at Tyr331. Immunolabeling is blocked by λ-phosphatase treatment.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Phospho-Tyr331 EphrinB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

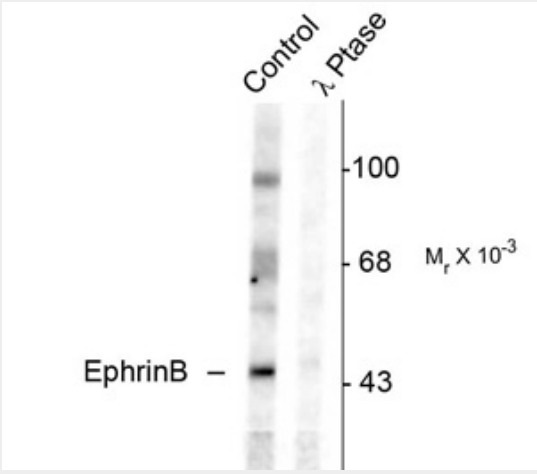
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Phospho-Tyr331 EphrinB Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Tyr331 EphrinB Antibody - Images



Western blot of rat testes lysate showing specific immunolabeling of the ~46k EphrinB phosphorylated at Tyr331 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that it was incubated in λ-Ptase (1200 units for 30 min) before being exposed to the Anti-Tyr331 EphrinB. The immunolabeling is completely eliminated by treatment with λ-Ptase.

Phospho-Tyr331 EphrinB Antibody - Background

EphrinB proteins are thought to play key roles in cellular functions as diverse as neuronal migration and blood vessel development (Flanagan and Vanderhaeghen, 1998; Dufour et al., 2003; Oike et al., 2002). EphrinB molecules expressed at the membrane surface bind to the EphB family receptors on target cells during cell-to cell contact. This interaction leads to cell signaling in the target cell but also generates a reverse signal in the cell expressing EphrinB on its surface. This reverse signaling event is thought to be critical for vessel maturation and neuronal development. Importantly, tyrosine phosphorylation of EphrinB is thought to be a critical component of this reverse signaling event (Palmer et al., 2002). Recent work demonstrated that Tyr331 of EphrinB was phosphorylated in HEK293 cells after timulation by the soluble EphB2 receptor tyrosine kinase (Kalo et al., 2001).

Phospho-Tyr331 EphrinB Antibody - References

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Dufour, A., Seibt, J., Passante, L., Depaepe, V., Ciossek, T., Frisen, J., Kullander, K., Flanagan, J.G., Polleux, F. and Vanderhaeghen, P. Area specificity and topography of thalamocortical projections are controlled by ephrin/Eph genes, Neuron 39:453-465 (2003).

Flanagan, J.G. and Vanderhaeghen, P. The ephrins and Eph receptors in neural development, Annu. Rev. Neurosci. 21:309-345 (1998).
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Palmer, A., Zimmer, M., Erdmann, K.S., Eulenburg, V., Porthin, A., Heumann, R., Deutsch, U. and Klein, R Ephrin B phosphorylation and reverse signaling: regulation by Src kinases and PTP-BL Phosphatase, Mol Cell 9:725-737 (2002).