

Phospho-Tyr331 EphrinB Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1087

Specification

Phospho-Tyr331 EphrinB Antibody - Product Information

Application	WB
Primary Accession	P28693
Reactivity Predicted	Rat 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

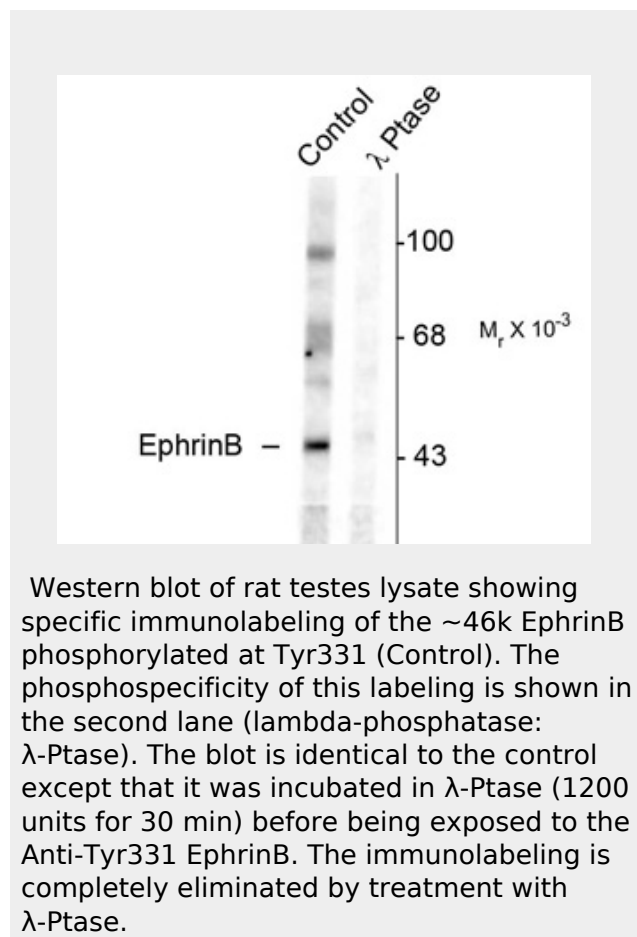
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

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.



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

Precautions

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

Shipping

Blue Ice

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 Cytometry](#)
- [Cell Culture](#)

of this reverse signaling event (Palmer et al., 2002). Recent work demonstrated that Tyr331 of EphrinB was phosphorylated in HEK293 cells after stimulation by the soluble EphB2 receptor tyrosine kinase (Kalo et al., 2001).

Phospho-Tyr331 EphrinB Antibody - References

- Bong, Y.S., Park, Y.H., Lee, H.S., Mood, K., Ishimura, A. and Daar, I.O. Tyr-298 in ephrinB1 is critical for an interaction with the Grb4 adaptor protein, *Biochem. J.* 377:499-507 (2004).
- 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).
- Oike, Y., Ito, Y., Hamada, K., Zhang, X.Q., Miyata, K., Arai, F., Inada, T., Araki, K., Nakagata, N., Takeya, M., Kisanuki, Y.Y., Yanagisawa, M., Gale, N.W. and Suda, T, Regulation of vasculogenesis and angiogenesis by EphB/ephrin-B2 signaling between endothelial cells and surrounding mesenchymal cells, *Blood* 100:1326-1333 (2002).
- 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).