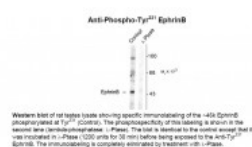




EphrinB (phospho Tyr331) Antibody

CATALOG NUMBER: 50-224



Western blot of rat testes lysate showing specific immunolabeling of the ~46kD EphrinB phosphorylated at Tyr³³¹ (Control). The phosphospecificity of this labeling is shown in the second lane (λ-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

Specifications

SPECIES REACTIVITY:	Bovine, Chicken, Human, Mouse, Rat, Xenopus, Zebrafish
TESTED APPLICATIONS:	WB
APPLICATIONS:	The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will react with bovine, chicken, human, mouse, Xenopus and zebra fish based on the fact that these species have 100% homology with the amino acid sequence used as antigen.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
PREDICTED MOLECULAR WEIGHT:	46
IMMUNOGEN:	Phosphopeptide corresponding to amino acid residues surrounding the phospho-Tyr ³³¹ of chicken EphrinB. Note: Chicken Tyr ³³¹ is the homolog of mouse and rat Tyr ³⁴³ , human Tyr ³⁴⁴ and also Xenopus Tyr ³²⁴ .
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Affinity Purified
PHYSICAL STATE:	Liquid
BUFFER:	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
STORAGE CONDITIONS:	EphrinB antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
CLONALITY:	Polyclonal
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	CEK5, EPH-like kinase 5, EK5
ACCESSION NO.:	P28693
PROTEIN GI NO.:	12230900
OFFICIAL SYMBOL:	EPHB2
GENE ID:	396513

Background

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 stimulation by the soluble EphB2 receptor tyrosine kinase (Kalo et al., 2001).
REFERENCES:	1) 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, <i>Biochem. J.</i> 377:499-507 (2004). 2) 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, <i>Neuron</i> 39:453-465 (2003). 3) Flanagan, J.G. and Vanderhaeghen, P. The ephrins and Eph receptors in neural development, <i>Annu. Rev. Neurosci.</i> 21:309-345 (1998).

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