



Anti-human Ephrin-B2

20150218BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-PA136AG
Size:	50 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>98%) recombinant human soluble Ephrin-B2 (Ile28-Ala229) derived from E. coli.

Target Background

Synonyms:	EPH-related receptor tyrosine kinase ligand 5; HTK ligand;
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The large families of Eph receptor tyrosine kinases and their Ephrin ligands transduce signals in a cell-cell contact-dependent fashion. They thereby coordinate the growth, differentiation, and patterning of almost every organ and tissue. Eph/Ephrin interactions can trigger a wide array of cellular responses, including cell adhesion, boundary formation, and repulsion. The exact mechanisms leading to this diversity of responses are unclear but appear to involve differential signaling, proteolytic cleavage of Ephrins, and endocytosis of the ligand-receptor complex. In the developing cardiovascular system, Eph and Ephrin molecules control the angiogenic remodeling of blood vessels and lymphatic vessels and play essential roles in endothelial cells as well as in supporting pericytes and vascular smooth muscle cells. Recent evidence suggests that Ephs and Ephrins may also be involved in pathological angiogenesis, in particular, the neovascularization of tumors. Consequently, the expression, interactions, or signaling of Eph/Ephrin molecules might be targets for future therapeutic approaches. All ligands share a conserved extracellular sequence. This conserved sequence consists of approximately 125 amino acids and includes four invariant cysteines. The B-class ligands are transmembrane proteins, which can be tyrosine phosphorylated upon receptor ligation. Class B ephrins show 33% amino acid sequence identity in their extracellular segments and 44% amino acid sequence identity in their cytoplasmic regions.

References

1. Adams RH et al, Genes Dev, 13:295-306, 1999
2. Noren NK et al, Proc Natl Acad Sci USA, 101:5583-8, 2004
3. Kertesz N et al, Blood 15;107(6):2330-8, 2006
4. Semela D et al, Gastroenterology 135(2):671-9, 2008
5. Kim YH et al, Development 135(22):3755-64, 2008
6. Bochenek ML et al, J Cell Sci 123(Pt 8):1235-46, 2010
7. Das A et al, Am J Physiol Gastrointest Liver Physiol 298(6):G908-15, 2010
8. Djokovic D et al, BMC Cancer, 10:641, 2010
9. Kim JH et al, Angiogenesis 15(3):497-509, 2012

Database References Antigen

Protein RefSeq:	NP_004084.1
Uniprot ID:	P52799
mRNA RefSeq:	NM_004093.3

Product Specifications

Species reactivity	human
Clone/Ab feature	rabbit IgG
Cross reactivity	n.d.
Host	rabbit
Clonality	polyclonal
Purification	Antigen affinity purified
Immunogen	recombinant human sEphrin-B2 (RT #S01-068)
Formulation	Lyophilized
Buffer	PBS, pH 7.2

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot: Use at 1-5 µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



Anti-human Ephrin-B2

Handling/Applications

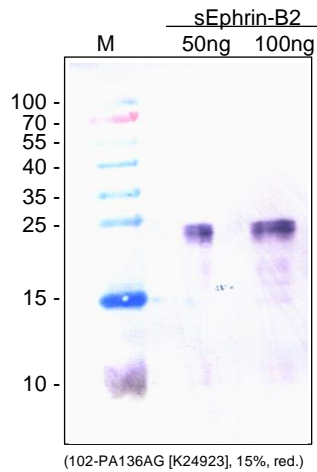


Figure 1: Western analysis of recombinant human soluble Ephrin-B2 [Cat# S01-068] using a antigen-affinity purified rabbit polyclonal anti-human Ephrin-B2 antibody [Cat# 102-PA136AG]. [WB: AP-conjugated secondary antibody]