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Anti-Ephrin B1 (Phospho-Y317) Antibody

Catalog # AP51645

Product Information

Application	WB, IHC
Primary Accession	P98172
Reactivity	Human, Mouse, Rat, Zebrafish, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38007

Additional Information

Gene ID	1947
Other Names	EFL3; EPLG2; LERK2; Ephrin-B1; EFL-3; ELK ligand; ELK-L; EPH-related receptor tyrosine kinase ligand 2; LERK-2
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding Y317 of human Ephrin B1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

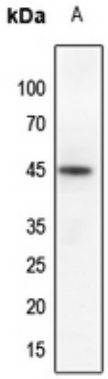
Name	EFNB1
Synonyms	EFL3, EPLG2, LERK2
Function	Cell surface transmembrane ligand for Eph receptors, a family of receptor tyrosine kinases which are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development (PubMed:7973638, PubMed:8070404). Binding to Eph receptors residing on adjacent cells leads to contact-dependent bidirectional signaling into neighboring cells (PubMed:7973638, PubMed:8070404). Shows high affinity for the receptor tyrosine kinase EPHB1/ELK (PubMed:7973638, PubMed:8070404). Can also bind EPHB2 and EPHB3 (PubMed:8070404). Binds to, and induces collapse of, commissural axons/growth cones in vitro (By similarity). May play a role in constraining the orientation of longitudinally projecting axons (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Membrane raft.

	Note=May recruit GRIP1 and GRIP2 to membrane raft domains [Ephrin-B1 intracellular domain]: Nucleus. Note=Colocalizes with ZHX2 in the nucleus. {ECO:0000250|UniProtKB:P52795}
Tissue Location	Widely expressed (PubMed:7973638, PubMed:8070404). Detected in both neuronal and non-neuronal tissues (PubMed:7973638, PubMed:8070404). Seems to have particularly strong expression in retina, sciatic nerve, heart and spinal cord (PubMed:7973638)

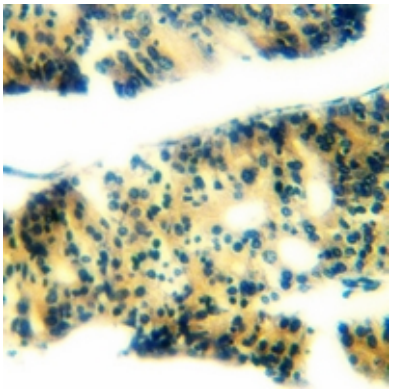
References

Beckmann M.P.,et al.EMBO J. 13:3757-3762(1994).
Davis S.,et al.Science 266:816-819(1994).
Fletcher F.A.,et al.Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
Ross M.T.,et al.Nature 434:325-337(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of Ephrin B1 (Phospho-Y317) expression in zebrafish (A) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 45 kD)



Immunohistochemical analysis of Ephrin B1 (Phospho-Y317) staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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