10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

phospho-Ephrin B (Tyr329) Rabbit pAb

Catalog # AP99865

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P98172
Other Accession	P98172
Reactivity	Human
Predicted	Rat, Pig, Mouse, Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38007
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from human Ephrin B around the phosphorylation site of Tyr329
Epitope Specificity	PV(p-Y)IV
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ephrin family.Contains 1 ephrin RBD (ephrin receptor-binding) domain.
SUBUNIT	Interacts with GRIP1 and GRIP2. Binds to Nipah virus G protein.
Post-translational modifications	Inducible phosphorylation of tyrosine residues in the cytoplasmic domain.
DISEASE	Defects in EFNB1 are a cause of craniofrontonasal syndrome (CFNS) [MIM:304110]; also known as craniofrontonasal dysplasia (CFND). CFNS is an X-linked inherited syndrome characterized by hypertelorism, coronal synostosis with brachycephaly, downslanting palpebral fissures, clefting of the nasal tip, joint anomalies, longitudinally grooved fingernails and other digital anomalies.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Ephrin B proteins are thought to play key roles in cellular functions as diverse as neuronal migration and blood vessel development. Ephrin B molecules expressed at the membrane surface bind to the Ephrin B 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 Ephrin B on its surface. This reverse signaling event is thought to be critical for vessel maturation and neuronal development. Importantly, tyrosine phosphorylation of Ephrin B is thought to be a critical component of this reverse signaling event. Recent work demonstrated that Tyr331 of Ephrin B was phosphorylated in HEK293 cells after stimulation by the soluble Ephrin B2 receptor tyrosine kinase.

Additional Information

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Gene ID	
Other Names	CFND; CFNS; EFB1; EFL3; EPLG2; Elk-L; LERK2; Cek5-L; EFL-3; Epl2; LERK-2; Stra1; EFNB1_HUMAN; EFNB1; ELK ligand (ELK-L); EPH-related receptor tyrosine kinase ligand 2 (LERK-2); EFNB1_MOUSE; CEK5 receptor ligand (CEK5-L); Stimulated by retinoic acid gene 1 protein; ephrin B1; craniofrontonasal syndrome (craniofrontonasal dysplasia); ephrin-B1; EPH-related receptor tyrosine kinase ligand 2; EFNB2 | Ephrin B (phospho-Y329); p-Ephrin B; phospho-Ephrin B; p-EFNB2; EFNB2 | Ephrin B (phospho-Tyr329)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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)

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