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

Anti-Ephexin-1 (Tyr-87), Phosphospecific Antibody

Catalog # AN1782

Product Information

Application	WB, ICC
Primary Accession	Q8CHT1
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	82199

Additional Information

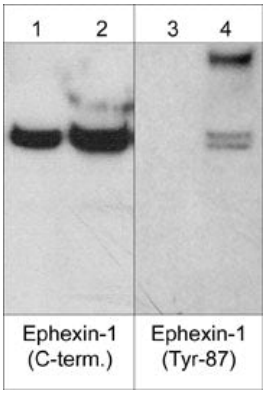
Gene ID	53972
Other Names	EphA, Eph, NGEF
Target/Specificity	The Eph family of receptor tyrosine kinases, and their ephrin ligands, are important for cell positioning and morphogenesis during development. EphA4 receptor can inhibit axon outgrowth and has roles in regulating axon projections during neural development. Eph signaling pathways require both receptor kinase activity and activation of Rho-GTPase guanine nucleotide-exchange factors (GEFs). Ephexin-1 is a Dbl family GEF that may be important for regulating Rho GTPase activity downstream of EphA4/FGFR complexes. EphA4 activation leads to Src kinase phosphorylation of Tyr-87 in ephexin-1, which enhances activation of RhoA, but not Rac1 or Cdc42. In addition, ephexin-1 also binds FGFRs, and is phosphorylated at Tyr-87, as well as other tyrosine sites.
Dilution	WB~~1:1000 ICC~~N/A
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.
Precautions	Anti-Ephexin-1 (Tyr-87), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

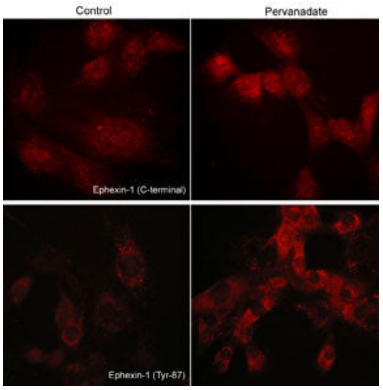
The Eph family of receptor tyrosine kinases, and their ephrin ligands, are important for cell positioning and morphogenesis during development. EphA4 receptor can inhibit axon outgrowth and has roles in regulating axon projections during neural development. Eph signaling pathways require both receptor kinase activity and activation of Rho-GTPase guanine nucleotide-exchange factors (GEFs). Ephexin-1 is a Dbl family GEF that may be important for regulating Rho GTPase activity downstream of EphA4/FGFR complexes. EphA4 activation leads to Src kinase phosphorylation of Tyr-87 in ephexin-1, which enhances activation of RhoA, but not Rac1 or Cdc42. In addition, ephexin-1 also binds FGFRs, and is phosphorylated at Tyr-87, as well as

other tyrosine sites.

Images



Western blot analysis of human A431 cells untreated (lanes 1 & 3) or treated with pervanadate (1 mM) for 30 min. (lanes 2 & 4). The blot was probed with anti-Ephexin-1 (C-terminal region) (lanes 1 & 2) and anti-Ephexin-1 (Tyr-87) (lanes 3 & 4).



Immunocytochemical labeling of phosphorylated Exphexin-1 in pervanadate-treated mouse C2C12. The cells were labeled with rabbit polyclonal Ephexin-1 (C-terminal region) and Ephexin-1 (Tyr-87) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.