

# Ephexin-1 (C-terminal region)

Cat. # EP2821

Host Rabbit Polyclonal

Size 100 µl

## Background:

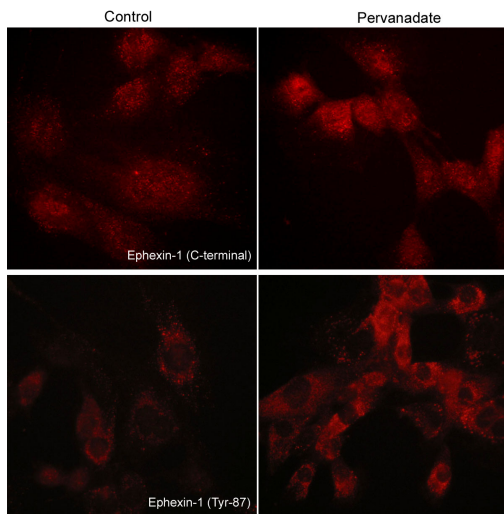
The Eph family of receptor tyrosine kinases, and their ephrin ligands, are important for cell positioning and morphogenesis during development. EphA4 receptor can inhibit axon outgrowth and has roles in regulating axon projections during neural development. Eph signaling pathways require both receptor 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.

## References

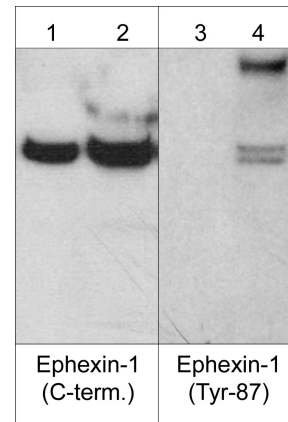
Shamah, S.M. et al. (2001) Cell 105:233.

Sahin, M. et al. (2005) Neuron 46:191.

Zhang, Y. et al. (2007) J Biol Chem. 282(42):31103.



Immunocytochemical labeling of phosphorylated Ephexin-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.



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).

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# Ephexin-1 (C-terminal region)

**Cat. #** EP2821

**Host** Rabbit Polyclonal

**Size** 100 µl

## **Immunogen:**

Ephexin-1 synthetic peptide (coupled to carrier protein) corresponds to amino acids in the C-terminal region of mouse ephexin-1. This sequence has significant homology to the same region in human and rat ephexin-1, and has low homology to other known proteins.

## **Buffer and Storage:**

Rabbit polyclonal, affinity-purified antibody is supplied in 100 µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

## **Applications:**

WB 1:1000

ELISA 1:2000

ICC 1:50

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1hour at room temperature.

## **Specificity:**

This polyclonal antibody was affinity purified using ephexin-1 (C-terminal region) peptide. The purified antibody detects an 80 kDa\* band corresponding to ephexin-1 in Western blots of human A431, Jurkat, and HUVEC cells, as well as rat PC12 cells and mouse brain tissue.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

## **Related Products:**

EP2841 Ephexin-1 (Tyr-87), phospho-specific Rabbit Polyclonal

EM2801 EphA4 (N-terminal region) Mouse Monoclonal

EP2711 EphA4 (C-terminal region) Rabbit Polyclonal

EP2731 EphA4 (Tyr-602), phospho-specific [Conserved site] Rabbit

EP2751 EphA4 (Tyr-779), phospho-specific [Conserved site] Rabbit

VP2481 Vav (a.a. 165-174) [Conserved site] Rabbit Polyclonal

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