

# Ephexin-1 (C-terminal region) Peptide

Cat. # EX2825

Size 50 µg

## **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.

## **Peptide Sequence:**

Ephexin-1 synthetic peptide corresponding to amino acids within the C-terminal region of mouse ephexin-1. This sequence has significant homology to the conserved site in human and rat ephexin-1, and has low homology to other known proteins.

## **Buffer and Storage:**

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.  
Store at -20°C. Stable for 1 year.

## **Applications:**

Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.  
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.  
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

## **Specificity:**

This peptide is recognized by ephexin-1 (C-terminal region) antibody (EP2821) in ELISA, and has been shown to block the reactivity of EP2821 in Western blot, and is recommended for blocking in immunocytochemistry.

## **Related Products:**

- EP2821 Ephexin-1 (C-terminal region) Rabbit Polyclonal  
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

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