

NGEF Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP21608a**Specification**

NGEF Blocking Peptide (N-term) - Product InformationPrimary Accession [Q8N5V2](#)**NGEF Blocking Peptide (N-term) - Additional Information****Gene ID** 25791**Other Names**

Ephexin-1, Eph-interacting exchange protein, Neuronal guanine nucleotide exchange factor, NGEF

Target/Specificity

The synthetic peptide sequence is selected from aa 187-200 of HUMAN NGEF

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NGEF Blocking Peptide (N-term) - Protein Information**Name** NGEF**Function**

Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse and dendritic spine morphogenesis. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1- and CDC42-stimulated growth cone extension (By similarity).

Cellular Location

Cytoplasm. Membrane. Cell projection, growth cone. Note=Associated with membranes. Localizes to axonal growth cones (By similarity)

Tissue Location

Highly expressed in brain specifically in caudate nucleus and to a lower extent in amygdala and hippocampus. Also detected in lung.

NGEF Blocking Peptide (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

NGEF Blocking Peptide (N-term) - Images

NGEF Blocking Peptide (N-term) - Background

Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse and dendritic spine morphogenesis. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1- and CDC42-stimulated growth cone extension (By similarity).

NGEF Blocking Peptide (N-term) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).
Rodrigues N.R.,et al.Genomics 65:53-61(2000).