NGEF Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21607b

Specification

NGEF Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q8N5V2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**82496**

NGEF Antibody (C-term) - Additional Information

Gene ID 25791

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

Target/Specificity
This NGEF antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 669-704 amino acids from the C-terminal region of human NGEF.

Dilution
WB~~1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NGEF Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NGEF Antibody (C-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 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NGEF Antibody (C-term) - Images
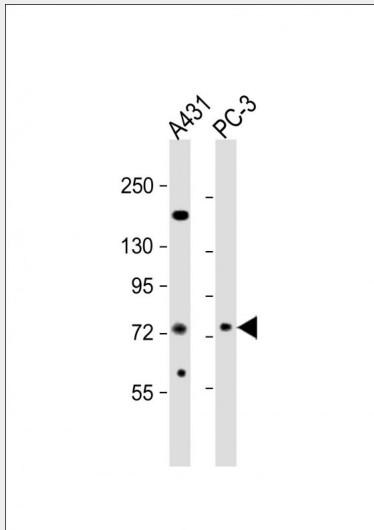
All lanes : Anti-NGEF Antibody (C-term) at 1:2000 dilution Lane 1: A431 whole cell lysates Lane 2: PC-3 whole cell lysates Lysates/proteins at 20 μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 82 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

NGEF Antibody (C-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 Antibody (C-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).