

Rabbit NEB2 Polyclonal Antibody | anti-NEB2 antibody

NEB2 Antibody

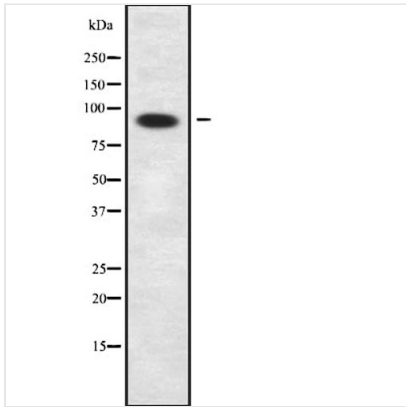
CATALOG # AAA322719	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

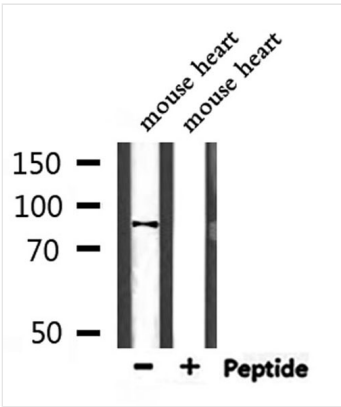
NEB2; Polyclonal Antibody; NEB2 Antibody; FLJ30345; NEB2_HUMAN; Neurabin II; Neurabin-2; Neurabin-II; Neurabin2; NeurabinII; Neural tissue specific F actin binding protein II; p130; PP1bp134; PPP1R6; PPP1R9; Ppp1r9b; Protein phosphatase 1 regulatory subunit 9B; SPINO; Spinophilin; anti-NEB2 antibody

PRODUCT SPECIFICATIONS

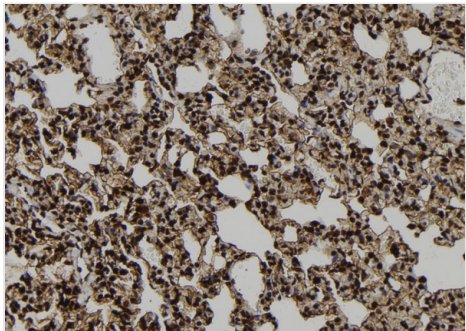
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	NEB2 antibody detects endogenous levels of total NEB2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	817
Applicable Applications for anti-NEB2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NEB2
Subcellular Location	Cytoplasm > Cytoskeleton. Nucleus. Cell Projection > Dendritic Spine. Cell Junction > Synapse. Cell Junction > Adherens Junction. Cytoplasm. Cell Membrane. Cell Projection > Lamellipodium. Cell Projection > Filopodium. Cell Projection > Ruffle Membrane. Enriched at synapse and cadherin-based cell-cell adhesion sites. In neurons, both cytosolic and membrane-associated, and highly enriched in the post-synaptic density apposed to excitatory synapses. Colocalizes with PPP1R2 at actin-rich adherens junctions in epithelial cells and in dendritic spines (By similarity). Accumulates in the lamellipodium, filopodium and ruffle membrane in response to hepatocyte growth factor (HGF) treatment.
Predicted Cross Reactivity	Pig, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis NEB2 using 293 whole cell lysates



WB (Western Blot)
Western blot analysis of extracts from mouse heart, using NEB2 Antibody.



IHC (Immunohistochemistry)
AAA322719 at 1/100 staining Rat lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-NEB2 antibody

Function: Seems to act as a scaffold protein in multiple signaling pathways. Modulates excitatory synaptic transmission and dendritic spine morphology. Binds to actin filaments (F-actin) and shows cross-linking activity. Binds along the sides of the F-actin. May play an important role in linking the actin cytoskeleton to the plasma membrane at the synaptic junction. Believed to target protein phosphatase 1/PP1 to dendritic spines, which are rich in F-actin, and regulates its specificity toward ion channels and other substrates, such as AMPA-type and NMDA-type glutamate receptors. Plays a role in regulation of G-protein coupled receptor signaling, including dopamine D2 receptors and alpha-adrenergic receptors. May establish a signaling complex for dopaminergic neurotransmission through D2 receptors by linking receptors downstream signaling molecules and the actin cytoskeleton. Binds to ADRA1B and RGS2 and mediates regulation of ADRA1B signaling. May confer to Rac signaling specificity by binding to both, RacGEFs and Rac effector proteins. Probably regulates p70 S6 kinase activity by forming a complex with TIAM1 (By similarity). Required for hepatocyte growth factor (HGF)-induced cell migration.

Subunit Structure: Interacts with DCLK2 (By similarity). Possibly exists as a homodimer, homotrimer or a homotetramer. Interacts with F-actin, PPP1CA, neurabin-1, TGN38 and D2 dopamine receptor. Interacts with RGS1, RGS2, RGS4, RGS19 and ADRA1B, ADRA2A, ADRA2B, ADRA2C, CDKN2A, PPP1R2, RASGFR1 and TIAM1. Interacts (via C-terminus) with SPATA13 (via C-terminal tail). Interacts with ADRA2B.

Post-translational Modifications: Stimulation of D1 (but not D2) dopamine receptors induces Ser-94 phosphorylation. Dephosphorylation of Ser-94 is mediated mainly by PP1 and to a lesser extent by PP2A. Phosphorylation of spinophilin disrupts its association with F-actin, but does not affect its binding to PP1 (By similarity).

Similarity: The PP1 binding region is natively unstructured, upon PP1 binding, it acquires structure, blocks a substrate-binding site, and restricts PP1 phosphatase specificity to a subset of substrates.

NCBI AND UNIPROT INFORMATION

NCBI GI #	140972063
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NCBI GeneID	84687
NCBI Accession #	NP_115984.3
NCBI GenBank Nucleotide #	NM_032595.4
UniProt Accession #	Q96SB3; Q8TCR9
Molecular Weight	Observed: 89 kDa Predicted: 90 kDa
NCBI Official Full Name	neurabin-2
NCBI Official Synonym Full Names	protein phosphatase 1 regulatory subunit 9B
NCBI Official Symbol	PPP1R9B
NCBI Official Synonym Symbols	Spn; SPINO; PPP1R6; PPP1R9
NCBI Protein Information	neurabin-2
UniProt Protein Name	Neurabin-2
UniProt Gene Name	PPP1R9B
UniProt Synonym Gene Names	PPP1R6

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/neb2-antibody-immunohistochemistry-western-blot-elisa/322719>