

---

## Neurabin 2 Rabbit pAb

Catalog Number: bs-12146R

Target Protein: Neurabin 2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

Reactivity: Mouse, Rat (predicted:Human, Pig, Sheep, Dog)

Predicted MW: 89 kDa

Entrez Gene: 84687

Swiss Prot: Q96SB3

Source: KLH conjugated synthetic peptide derived from human Spinophilin/Neurabin 2: 358-460/815.

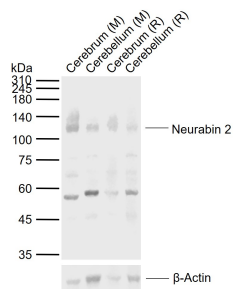
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

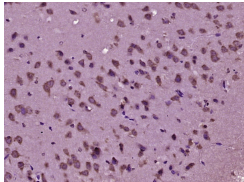
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Neurabin-II, also called spinophilin, interacts with actin and PP-1 in dendritic spines of the central nervous system (1,2). The gene encoding human neurabin-II maps to chromosome 17q21-q22 (2). The structural characteristics of neurabin-II include one F-actin binding domain at the N-terminal region, a predicted coiled-coil structure at the C-terminal, one PDZ domain at the middle region, and a domain known to interact with transmembrane proteins (1). Neurabin-II bundles actin filaments in vitro (1). In vivo, spinophilin localizes to the cortical sites of actin filaments and to the sites of active membrane remodelling (4). Neurabin-II also forms a complex with the catalytic subunit of PP1 and modulates PP1 enzymatic activity in vitro (2). Neurabin-II localizes to the head of dendritic spines (2) and aids in the ability of PP-1 to regulate the activity of  $\alpha$ -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) and N-methyl-D-aspartate (NMDA) receptors (3). In this manner, neurabin-II modulates both glutamatergic synaptic transmission and dendritic morphology (3). Synergistic interactions between spinophilin and human tumor suppressor ARF suggest a role for neurabin-II in cell growth (5).

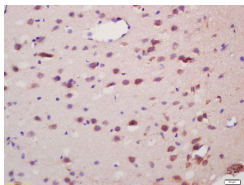
## VALIDATION IMAGES



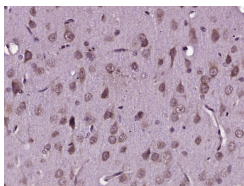
Sample: Lane 1: Mouse Cerebrum tissue lysates Lane 2: Mouse Cerebellum tissue lysates Lane 3: Rat Cerebrum tissue lysates Lane 4: Rat Cerebellum tissue lysates Primary: Anti-Neurabin 2 (bs-12146R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 89 kDa Observed band size: 115 kDa



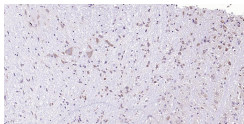
Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Neurabin 2) Polyclonal Antibody, Unconjugated (bs-12146R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



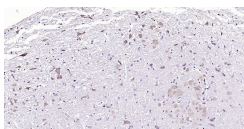
Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Neurabin 2 Polyclonal Antibody, Unconjugated(bs-12146R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Neurabin 2) Polyclonal Antibody, Unconjugated (bs-12146R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Neurabin 2) Polyclonal Antibody, Unconjugated (bs-12146R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Neurabin 2) Polyclonal Antibody, Unconjugated (bs-12146R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.