bs-12146R **[Primary Antibody]**

Neurabin 2 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 84687 **SWISS:** Q96SB3

Target: Neurabin 2

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

Purification: affinity purified by Protein A

Concentration: 1mg/ml

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 struture 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 fliaments 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 a-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) and N-methyl-D-asparate (NMDA) receptors (3). In this manner, neurabin-II modulates both glutamatergic synaptic transmission and dendritic morphology (3). Synergistic interactions between spinophilin and human tumor supressor ARF suggest a role for neurabin-II in cell growth (5).

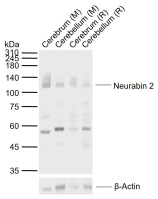
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

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

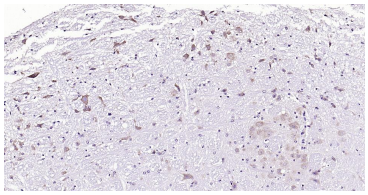
Predicted MW.: 89 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

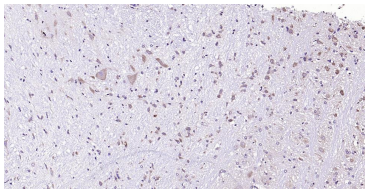
VALIDATION IMAGES



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 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) instructionsand 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) instructionsand DAB staining.