

## Phospho-MAP2 (Thr1613/1619) Rabbit pAb

Catalog Number: bs-16042R

Target Protein: Phospho-MAP2 (Thr1613/1619)

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), Flow-Cyt (2ug/Test)

Reactivity: Human, Mouse, Rat (predicted:Rabbit, Pig, Cow, Chicken, Dog, Horse)

Predicted MW: 70/201 kDa

Entrez Gene: 4133 Swiss Prot: P11137

Source: KLH conjugated synthesised phosphopeptide derived from human MAP2 around the

phosphorylation site of Thr1613 and Thr1619: SR(p-T)PGTPG(p-T)PS.

Purification: affinity purified by Protein A

Storage: Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.

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

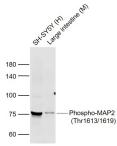
Background: MAP2 is the major microtubule associated protein of brain tissue. There are three forms of

MAP2; two are similarly sized with apparent molecular weights of 280 kDa (MAP2a and MAP2b) and the third with a lower molecular weight of 70 kDa (MAP2c). In the newborn rat brain, MAP2b and MAP2c are present, while MAP2a is absent. Between postnatal days 10 and

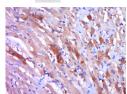
20, MAP2a appears. At the same time, the level of MAP2c drops by 10-fold. This change happens during the period when dendrite growth is completed and when neurons have reached their mature morphology. MAP2 is degraded by a Cathepsin D-like protease in the brain of aged rats. There is some indication that MAP2 is expressed at higher levels in some types of neurons than in other types. MAP2 is known to promote microtubule assembly and to form side-arms on microtubules. It also interacts with neurofilaments, actin, and other

elements of the cytoskeleton.

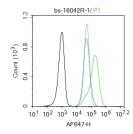
## **VALIDATION IMAGES**



Sample: Lane 1: SH-SY5Y (Human) Cell Lysate at 30 ug Lane 2: Large intestine (Mouse) Lysate at 40 ug Primary: Anti-Phospho-MAP2 (Thr1613/1619) (bs-16042R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 280/70-82 kD Observed band size: 75 kD



Paraformaldehyde-fixed, paraffin embedded (Rat heart); 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 (P-MAP2 (Thr1613,1619)) Polyclonal Antibody, Unconjugated (bs-16042R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: SH-SY5Y. Primary Antibody (green line): Rabbit Anti-Phospho-MAP2 (Thr1613/1619) antibody (bs-10642R) Dilution:  $1\mu g/10^6$  cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody: Goat anti-rabbit IgG-AF647 Dilution:  $1\mu g$ /test. Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature . Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.