bs-3113R **[Primary Antibody]**

phospho-Doublecortin (Ser47) Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1641 **SWISS:** O43602

Target: Doublecortin (Ser47)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human Doublecortin around the phosphorylation site of Ser47: AL(p-S)NE.

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: Neuronal Marker

Doublecortin (DCX) is a microtubule-associated protein expressed almost exclusively in immature neurons. Neuronal precursors begin to express DCX shortly after exiting the cell cycle, and continue to express DCX for 2-3 weeks as the cells mature into neurons. Downregulation of DCX begins after 2 weeks, and occurs at the same time that these cells begin to express, a marker for mature neurons. Due to the nearly exclusive expression of DCX in developing neurons, this protein has been used increasingly as a marker for neurogenesis. Indeed, the levels of DCX expression increase in response to exercise, which occurs in parallel with increased BrdU labelling, currently a "gold standard" in measuring neurogenesis.

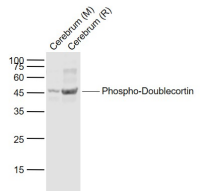
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1μg/Test)
ICC/IF (1:100)

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

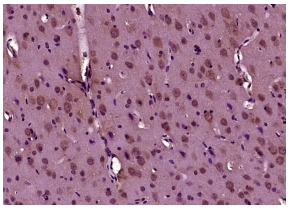
Predicted MW.: 40 kDa

Subcellular Location: Cytoplasm

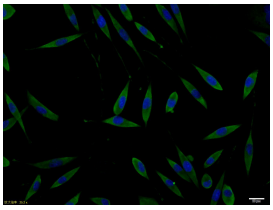
VALIDATION IMAGES



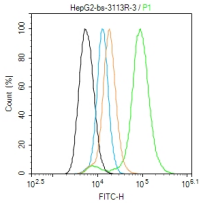
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Cerebrum (Rat) Lysate at 40 ug Primary: Anti-Phospho-Doublecortin (Ser47) (bs-3113R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 45 kD Observed band size: 45 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 (Phospho-Doublecortin (Ser128)) Polyclonal Antibody, Unconjugated (bs-3113R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



SHSY5Y cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Phospho-Doublecortin (Ser128)) polyclonal Antibody, Unconjugated (bs-3113R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control (black line): HepG2(black) (The

cells were fixed with 2% paraformaldehyde (10 min) , then permeabilized with PBST for 30 min on room temperature) Primary Antibody (green line): Rabbit Anti-Phospho-Doublecortin(Ser128)(bs-3113R) ; Dilution: 1µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC;Dilution: 1µg /test.

SELECTED CITATIONS

- **[IF=3.121]** Cho-Won Kim et al. Inhibitory effects of cigarette smoke extracts on neural differentiation of Mouseembryonic stem cells. Reprod Toxicol. 2020 Aug;95:75-85. WB ;Mouse. 32454085