### bs-17445R

## [ Primary Antibody ]

# phospho-TrkA (Tyr490) 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: 4914 SWISS:** P04629

Target: TrkA (Tyr490)

Immunogen: KLH conjugated synthesised phosphopeptide derived from human

TrkA isoform 1(790aa) around the phosphorylation site of Tyr490:

PQ(p-Y)FS.

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: The Trk family of nerve growth factor receptors includes Trk A(also referfed to as Trk A gp140), Trk B and Trk C. The prototype member

of this gene family, Trk A, encodes a 140 kDa cell surface receptor, gp140, the expression of which is restricted in vivo to neurons of the sensory spinal and cranial gangliaof neurocrest origin. Nerve growth factor (NGF) stimulates tyrosine phosphorylation of Trk gp 140 in neural cell lines and in embryonic dorsal root ganglia. By comparison, BDNF and to a lesser extent, NT-3, but not NGF, can induce tyrosine phophorylayion of Trk B gp 145. The third member of the Trk receptor family, Trk C incodes a 140 kDa protein, Trk C gp140, that is preferentially expressed in brain tissue and primarily functions as a receptor for NT-3.An additional component of the Trk receptor complex, NGFR p175, binds to neurotrophic factors with low affinity but is required for efficient signaling. NGFR p175 accelerates Trk activation and may recruit downstream dffector molecules to the ligand-bound receptor complex.

Applications: WB (1:500-2000)

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

Reactivity: Human, Mouse, Rat

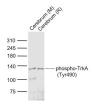
(predicted: Sheep, Chicken,

Horse)

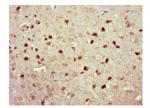
Predicted 90 kDa MW.:

Subcellular Location: Cell membrane ,Cytoplasm

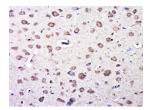
#### VALIDATION IMAGES



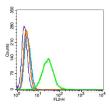
Sample: Lane 1: Cerebrum (Mouse) Lysate at 40 ug Lane 2: Cerebrum (Rat) Lysate at 40 ug Primary: Anti-phospho-TrkA (Tyr490) (bs-17445R) at 1/1000 dilution Secondary: IRDve800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 130 kD Observed band size: 130 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse 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-TrkA (Tyr490)) Polyclonal Antibody, Unconjugated (bs-17445R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



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-TrkA (Tyr490)) Polyclonal Antibody, Unconjugated (bs-17445R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control(blue): RSC96 cells (fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice). Primary Antibody:Rabbit Anti-phospho-TrkA (Tyr490) antibody(bs-17445R), Dilution: 0.2 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions ); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

### - SELECTED CITATIONS -

- [IF=10] Yu Renjie. et al. Promoter Hyper-methylation of ZNF662 Restrains its Tumor Suppressing Function in Triple-Negative Breast Cancer Through Regulating NGF Signaling Axis. INT J BIOL SCI. 2025 Jun;21(9):4081-4097 WB; Human. 40612670
- [IF=4.225] Liu P et al. Harmine Ameliorates Cognitive Impairment by Inhibiting NLRP3 Inflammasome Activation and Enhancing the BDNF/TrkB Signaling Pathway in STZ-Induced Diabetic Rats. Front Pharmacol. 2020 May 1;11:535. WB;Rat. 32425784