**BACKGROUND**

The Trk proto-oncogene encodes a membrane-spanning protein tyrosine kinase, Trk gp140, also designated Trk A, whose expression is restricted in vivo to neurons of the sensory spinal and cranial ganglia of neural crest origin. Nerve growth factor (NGF) stimulates tyrosine phosphorylation of Trk A in neural cell lines and in embryonic dorsal root ganglia. Tyrosine phosphorylation of Trk by NGF is rapid, specific and occurs with picomolar quantities of factor, indicating that the response is mediated by physiological amounts of NGF. Unlike Trk A, tyrosine phosphorylation of Trk B is induced by the brain-derived neurotrophic factor (BDNF) and, to a lesser extent, neurotrophin-3 (NT-3). Additionally, Trk C phosphorylation is induced via interaction by endogenously produced NT-3 and is not dependent on stimulation by NGF.

**SOURCE**

p-Trk A (E-6) is a mouse monoclonal antibody raised against a sequence containing Tyr 496 phosphorylated Trk A of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p-Trk A (E-6) is available conjugated to agarose (sc-8058 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8058 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-8058 PE), fluorescein (sc-8058 FITC), Alexa Fluor® 488 (sc-8058 AF488) or Alexa Fluor® 647 (sc-8058 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-8058 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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**APPLICATIONS**

p-Trk A (E-6) is recommended for detection of Tyr 496 phosphorylated Trk A and correspondingly phosphorylated TrkB and TrkC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of p-Trk A: 140 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, Ramos cell lysate: sc-2216 or RAW 264.7 + IFN-γ cell lysate: sc-2259.

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**DATA**

Western blot analysis of Trk activation in untreated (A,C) and γ-interferon induced (B,D) RAW 264.7 cells. Antibodies tested include a phospho-specific Trk monoclonal, p-Trk A (E-6): sc-8058 (A,B) and a control antibody, Trk (B-3): sc-7268 (C,D).

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.