Trk A (C-20): sc-20539

**BACKGROUND**

The Trk proto-oncogene encodes a tyrosine protein kinase, Trk A, also designated Trk gp140, that serves as a receptor for certain neurotrophic factors including nerve growth factor (NGF) and neurotrophin-3 (NT-3). TrkB is a tyrosine kinase gene highly related to Trk A. TrkB expression is confined to tissues within the central and peripheral nervous systems. The brain-derived neurotrophic factor (BDNF) and NT-3, but not NGF, can induce rapid phosphorylation on Tyrosine of TrkB gp145, one of the receptors encoded by TrkB, although BDNF elicits a response at least two orders of magnitude greater than NT-3. Thus it appears that TrkB gp145 may represent a neurotrophic receptor for BDNF and NT-3. The third member of the Trk family of tyrosine kinases, Trk C, encodes a protein designated Trk C gp145 that is preferentially expressed in brain tissue, is equally related to Trk A and TrkB and is a functional receptor for NT-3.

**CHROMOSOMAL LOCATION**

Genetic locus: NTRK1 (human) mapping to 1q23.1; Ntrk1 (mouse) mapping to 3 F1.

**SOURCE**

Trk A (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of Trk A of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20539 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Trk A (C-20) is recommended for detection of Trk A 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Trk A (C-20) is also recommended for detection of Trk A in additional species, including equine, canine, bovine and porcine.


Molecular Weight of Trk A: 80 kDa.

Molecular Weight of glycosylated Trk A: 140 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, H4 cell lysate: sc-2408 or SK-N-SH cell lysate: sc-2410.

**STORAGE**

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

**DATA**

Trk A (C-20), sc-20539. Western blot analysis of Trk A expression in PC-12 whole cell lysate.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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

**MONOS Satisfaction Guaranteed**

Try Trk A (Y32Ex): sc-80398, our highly recommended monoclonal alternative to Trk A (C-20).