

# Trk A (763): sc-118

## 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). Trk B is a tyrosine kinase gene highly related to Trk A. Trk B 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 Trk B gp145, one of the receptors encoded by Trk B, although BDNF elicits a response at least two orders of magnitude greater than NT-3. Thus it appears that Trk B 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 Trk B 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 (763) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of Trk A of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-118 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as PE conjugate for flow cytometry, sc-118 PE, 100 tests.

## APPLICATIONS

Trk A (763) 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Trk A (763) is also recommended for detection of Trk A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Trk A siRNA (h): sc-36726, Trk A siRNA (m): sc-36727, Trk A shRNA Plasmid (h): sc-36726-SH, Trk A shRNA Plasmid (m): sc-36727-SH, Trk A shRNA (h) Lentiviral Particles: sc-36726-V and Trk A shRNA (m) Lentiviral Particles: sc-36727-V.

Molecular Weight of Trk A: 80 kDa.

Molecular Weight of glycosylated Trk A: 140 kDa.

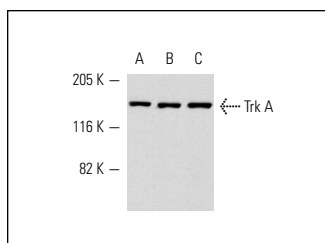
## STORAGE

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

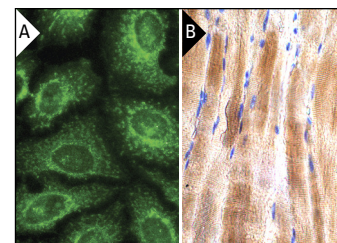
## RESEARCH USE

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

## DATA



Trk A (763): sc-118. Western blot analysis of Trk A expression in PC-12 (A), H4 (B) and SK-N-SH (C) whole cell lysates.



Trk A (763): sc-118. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes (B).

## SELECT PRODUCT CITATIONS

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Try **Trk A (Y32Ex): sc-80398**, our highly recommended monoclonal alternative to Trk A (763).