

# TRAX (I-20): sc-69638

## BACKGROUND

TRAX (translin-associated factor X), also known as TSNAX, is a nuclear protein that interacts with translin, a DNA-binding protein involved in breakpoint junctions of chromosomal translocations. Expressed highly in the brain and testis, TRAX contains an N-terminal bipartite nuclear localization signal (NLS) and a leucine zipper domain. The NLS may be involved in the nuclear transport of translin, while the leucine zipper domain is essential for interactions between TRAX and other proteins. When TRAX is complexed with translin, the two proteins can interact with the protein kinase activator C1D, allowing the complex to participate in DNA double-stranded break repair and dendritic RNA processing. TRAX also functions as a transcriptional regulator of GAP-43, a growth-associated protein found in growth cones, suggesting a possible role in axonal regeneration and cell proliferation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TSNAX (human) mapping to 1q42.2; Tsnax (mouse) mapping to 8 E2.

## SOURCE

TRAX (I-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRAX of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69638 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-69638 X, 200  $\mu$ g/0.1 ml.

## APPLICATIONS

TRAX (I-20) is recommended for detection of TRAX of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

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

Suitable for use as control antibody for TRAX siRNA (h): sc-76726, TRAX shRNA Plasmid (h): sc-76726-SH and TRAX shRNA (h) Lentiviral Particles: sc-76726-V.

TRAX (I-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TRAX: 33 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or NIH/3T3 whole cell lysate: sc-2210.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.