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# translin (m): 293T Lysate: sc-124256

## BACKGROUND

Translin, also designated testis brain-RNA-binding protein (TB-RBP), is a single-stranded DNA- and RNA-binding protein that binds to the 3' UTR regions (Y and H elements) of stored mRNAs, which suppresses their *in vitro* translation. The human translin gene maps to chromosome 2q21.1 and encodes a protein that has been highly conserved throughout evolution. Translin forms a ring-shaped structure, which is responsible for DNA binding, and also contains a leucine zipper motif, which is thought to enable translin to form dimers. Translin exports specific mRNAs out of the nucleus, supported by its localization in both the nuclei and cytoplasm of neurons, and regulates their translation. Association with Trax (translin-associated factor X), inhibits the binding of translin to RNA, but enhances its binding to single stranded DNA sequences. Breakpoints in the TLS/FUS and CHOP loci contain consensus recognition motifs of translin, which associates with chromosomal translocations in liposarcomas.

## REFERENCES

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- Wu, X.Q. and Hecht, N.B. 2000. Mouse testis brain ribonucleic acid-binding protein/translin colocalizes with microtubules and is immunoprecipitated with messenger ribonucleic acids encoding myelin basic protein,  $\alpha$  calmodulin kinase II, and protamines 1 and 2. *Biol. Reprod.* 62: 720-725.

## CHROMOSOMAL LOCATION

Genetic locus: Tsn (mouse) mapping to 1 E2.3.

## PRODUCT

translin (m): 293T Lysate represents a lysate of mouse translin transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

translin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive translin antibodies. Recommended use: 10-20  $\mu$ l per lane.

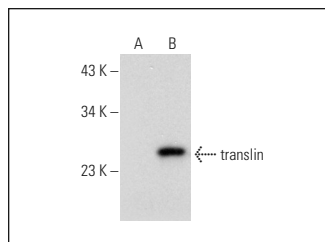
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

translin (C-2): sc-390472 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse translin expression in translin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



translin (C-2): sc-390472. Western blot analysis of translin expression in non-transfected: sc-117752 (A) and mouse translin transfected: sc-124256 (B) 293T whole cell lysates.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.