

# STAC (S-14): sc-99645

## BACKGROUND

STAC (SH3 and cysteine rich domain-containing protein), also known as STAC1, is a 402 amino acid protein that contains one SH3 (Src homology 3) domain and one cysteine-rich domain (CRD). Expressed in brain, STAC is a neuron-specific protein that localizes to the cytoplasm and, based on the frequent involvement of SH3 and CRD domains in signal transduction, is believed to play a role in neuron-specific signal transduction. In addition, STAC may be involved in protecting cells from apoptosis. Due to its neuron-specific expression and putative role in signal transduction, STAC may be implicated in a variety of hereditary neurological diseases.

## REFERENCES

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2. Kawai, J., Suzuki, H., Hara, A., Hirose, K. and Watanabe, S. 1998. Human and mouse chromosomal mapping of STAC, a neuron-specific protein with an SH3 domain. *Genomics* 47: 140-142.
3. Petek, E., Emberger, W., Kroisel, P.M. and Wagner, K. 1999. Assignment of STAC to human chromosome band 3p22.3 between D3S3718 and D3S1611. *Cytogenet. Cell Genet.* 84: 184-185.
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## CHROMOSOMAL LOCATION

Genetic locus: STAC (human) mapping to 3p22.3; Stac (mouse) mapping to 9 F3.

## SOURCE

STAC (S-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of STAC 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-99645 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

STAC (S-14) is recommended for detection of STAC 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); non cross-reactive with family members STAC2 or STAC3.

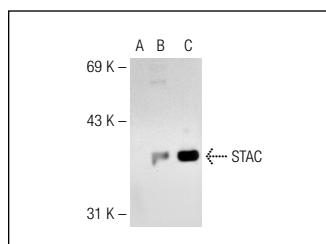
STAC (S-14) is also recommended for detection of STAC in additional species, including bovine and porcine.

Suitable for use as control antibody for STAC siRNA (h): sc-78015, STAC siRNA (m): sc-153871, STAC shRNA Plasmid (h): sc-78015-SH, STAC shRNA Plasmid (m): sc-153871-SH, STAC shRNA (h) Lentiviral Particles: sc-78015-V and STAC shRNA (m) Lentiviral Particles: sc-153871-V.

Molecular Weight of STAC: 45 kDa.

Positive Controls: STAC (h2): 293T Lysate: sc-170902 or A-431 whole cell lysate: sc-2201.

## DATA



STAC (S-14): sc-99645. Western blot analysis of STAC expression in non-transfected 293T: sc-117752 (A), human STAC transfected 293T: sc-170902 (B) and A-431 (C) whole cell lysates.

## 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) or our catalog for detailed protocols and support products.



Try **STAC (J-19): sc-100661**, our highly recommended monoclonal alternative to STAC (S-14).