

# STAC (J-19): sc-100661

## 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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6. Kato, Y., Uzawa, K., Saito, K., Nakashima, D., Kato, M., Nimura, Y., Seki, N. and Tanzawa, H. 2006. Gene expression pattern in oral cancer cervical lymph node metastasis. *Oncol. Rep.* 16: 1009-1014.
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## CHROMOSOMAL LOCATION

Genetic locus: STAC (human) mapping to 3p22.3.

## SOURCE

STAC (J-19) is a mouse monoclonal antibody raised against recombinant STAC of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

STAC (J-19) is recommended for detection of STAC of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

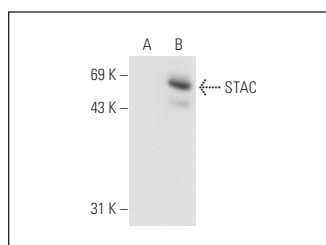
Molecular Weight of STAC: 45 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or STAC (h): 293T Lysate: sc-170170.

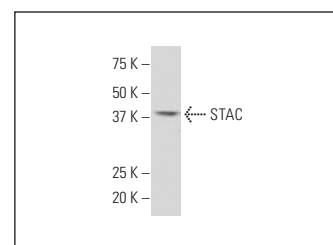
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



STAC (J-19): sc-100661. Western blot analysis of STAC expression in non-transfected: sc-117752 (A) and human STAC transfected: sc-170170 (B) 293T whole cell lysates.



STAC (J-19): sc-100661. Western blot analysis of STAC expression in A-431 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) for detailed protocols and support products.