

# STAC3 (S-12): sc-169441

## BACKGROUND

The Src homology 3 (SH3) domain is a highly conserved 60 amino acid protein domain that is organized into a  $\beta$ -barrel fold consisting of 5 or 6  $\beta$  strands arranged as 2 tightly packed anti-parallel  $\beta$  sheets. This domain is found in proteins that mediate assembly of specific protein complexes and interact with other proteins, specifically recognizing proline-rich regions. STAC3 (SH3 and cysteine rich domain 3) is a 364 amino acid protein containing one phorbol-ester/DAG-type zinc finger and two SH3 (Src homology 3) domains. Existing as two alternatively spliced isoforms, STAC3 maps to human chromosome 12q13.3. Human chromosome 12 encodes over 1,400 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypo-chondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## CHROMOSOMAL LOCATION

Genetic locus: STAC3 (human) mapping to 12q13.3; Stac3 (mouse) mapping to 10 D3.

## SOURCE

STAC3 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of STAC3 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-169441 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

STAC3 (S-12) is recommended for detection of STAC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 STAC or STAC2.

STAC3 (S-12) is also recommended for detection of STAC3 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for STAC3 siRNA (h): sc-95967, STAC3 siRNA (m): sc-153873, STAC3 shRNA Plasmid (h): sc-95967-SH, STAC3 shRNA Plasmid (m): sc-153873-SH, STAC3 shRNA (h) Lentiviral Particles: sc-95967-V and STAC3 shRNA (m) Lentiviral Particles: sc-153873-V.

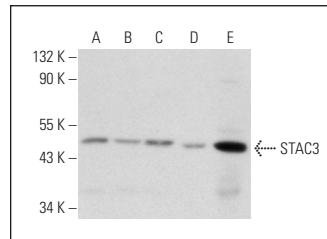
Molecular Weight of STAC3 isoforms 1/2: 32/27 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or C2C12 whole cell lysate: sc-364188.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



STAC3 (S-12): sc-169441. Western blot analysis of STAC3 expression in A549 (A), NTERA-2 cl.D1 (B), HeLa (C) and C2C12 (D) whole cell lysates and rat skeletal muscle tissue extract (E).

## STORAGE

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

## PROTOCOLS

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

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Try **STAC3 (E-2): sc-514742**, our highly recommended monoclonal alternative to STAC3 (S-12).