# SANTA CRUZ BIOTECHNOLOGY, INC.

# Sp5 (D-16): sc-169391



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## BACKGROUND

The Sp transcription factor family includes Sp1, Sp2, Sp3 (SPR-2), Sp4 (SPR-1) and Sp5. Sp transcription factors share similar structures but do not share similar functions. All five proteins contain a highly conserved DNA-binding domain composed of three zinc fingers at the C-terminus. Sp family members bind the consensus sequence GGGGCGGGGC and other closely related sequences which are known as GC boxes. Sp5 is a 398 amino acid transcription factor that localizes to the nucleus and contains three  $C_2H_2$ -type zinc fingers. Sp5 is suggested to have a role in the coordination of changes in transcription required to generate patterns in the developing embryo. Sp5 is considered a novel direct down-stream target in the Wnt signaling pathway, which regulates many processes during vertebrate development.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SP5 (human) mapping to 2q31.1; Sp5 (mouse) mapping to 2 C2.

## SOURCE

Sp5 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sp5 of human origin.

# **RESEARCH USE**

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-169391 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-169391 X, 200  $\mu$ g/0.1 ml.

## **APPLICATIONS**

Sp5 (D-16) is recommended for detection of Sp5 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).

Sp5 (D-16) is also recommended for detection of Sp5 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Sp5 siRNA (h): sc-94751, Sp5 siRNA (m): sc-153690, Sp5 shRNA Plasmid (h): sc-94751-SH, Sp5 shRNA Plasmid (m): sc-153690-SH, Sp5 shRNA (h) Lentiviral Particles: sc-94751-V and Sp5 shRNA (m) Lentiviral Particles: sc-153690-V.

Sp5 (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sp5: 42 kDa.

## **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) Immunofluo-rescence: use 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.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.