

SPZ1 (F-15): sc-107296

BACKGROUND

SPZ1 (spermatogenic leucine zipper 1), also known as NYD-TSP1, is a 430 amino acid testis specific protein that localizes to the nucleus and cytoplasm. Containing one basic helix-loop-helix (bHLH) domain, SPZ1 is phosphorylated by ERK 1 and ERK 2. SPZ1 is suggested to mediate mitogen-activated protein kinase cell proliferation, transformation and tumorigenesis. SPZ1 is a transcription factor that binds to the DNA sequence 5'-CANNTG-3'(E box) and the G-box motif and may play an important role in the regulation of cell proliferation and differentiation during spermatogenesis. Expressed at high levels in several tumor cell lines, SPZ1 acts as a proto-oncogene, participating in the MAPK signal pathway, and may be a potential therapeutic target in the treatment of Ras-induced tumors.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Spz1 (mouse) mapping to 13 C3.

SOURCE

SPZ1 (F-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within the DNA binding domain of SPZ1 of rat origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107296 P, (100 μ 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-107296 X, 200 μ g/0.1 ml.

APPLICATIONS

SPZ1 (F-15) is recommended for detection of SPZ1 of rat and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

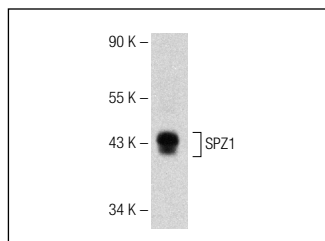
SPZ1 (F-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SPZ1: 44 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) 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



SPZ1 (F-15): sc-107296. Western blot analysis of SPZ1 expression in mouse lung tissue extract.

RESEARCH USE

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