SANTA CRUZ BIOTECHNOLOGY, INC.

INSM1 (S-19): sc-54224



BACKGROUND

INSM1 (insulinoma-associated protein 1), also known as zinc finger protein IA-1, is a developmentally regulated zinc finger transcription factor. It localizes to the nucleus and is expressed in embryonic tissues undergoing neuroendocrine differentiation. INSM1 is not expressed in normal adult tissues but it can be found highly expressed in neuroendocrine tumors. INSM1 contains five Cys₂-His₂-type zinc finger DNA binding domains and a prohormone domain. INSM1 acts as a transcriptional repressor of the Neuro D promoter and recruits cyclin D1 as a co-repressor. It plays an important role in neuroendocrine development and is required for normal differentiation of pancreatic endocrine cells. Inhibition of INSM1 results in decreased formation of glucagon and Insulin positive cells. The gene encoding INSM1 is directly regulated by Neurogenin 3 which binds chromatin in the INSM1 promoter region and induces transcription.

CHROMOSOMAL LOCATION

Genetic locus: INSM1 (human) mapping to 20p11.23; Insm1 (mouse) mapping to 2 G1.

SOURCE

INSM1 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of INSM1 of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-54224 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-54224 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

INSM1 (S-19) is recommended for detection of INSM1 of mouse, rat and human 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).

INSM1 (S-19) is also recommended for detection of INSM1 in additional species, including bovine.

Suitable for use as control antibody for INSM1 siRNA (h): sc-72309, INSM1 siRNA (m): sc-72310, INSM1 shRNA Plasmid (h): sc-72309-SH, INSM1 shRNA Plasmid (m): sc-72310-SH, INSM1 shRNA (h) Lentiviral Particles: sc-72309-V and INSM1 shRNA (m) Lentiviral Particles: sc-72310-V.

INSM1 (S-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of INSM1: 58 kDa.

Positive Controls: INSM1 (m): 293T Lysate: sc-127011 or TT whole cell lysate: sc-364195.

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





 $\rm INSM1$ (S-19): sc-54224. Western blot analysis of $\rm INSM1$ expression in non-transfected: sc-117752 (A) and mouse INSM1 transfected: sc-127011 (B) 293T whole cell lysates.

INSM1 (S-19): sc-54224. Western blot analysis of INSM1 expression in TT whole cell lysate.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try INSM1 (A-8): sc-271408 or INSM1 (C-1): sc-377428, our highly recommended monoclonal alternatives to INSM1 (S-19).