SANTA CRUZ BIOTECHNOLOGY, INC.

MGC42105 (N-20): sc-130171

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. MGC42105, also known as NIM1, is a 436 amino acid protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Using magnesium as a cofactor, MGC42105 functions to catalyze the ATP-dependent phosphorylation of target proteins. Additionally, human MGC42105 is capable of autophosphorylation at Thr 229, an event that activates MGC42105 activity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MGC42105 (human) mapping to 5p12.

SOURCE

MGC42105 (N-20) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of MGC42105 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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.

RESEARCH USE

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

APPLICATIONS

MGC42105 (N-20) is recommended for detection of MGC42105 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).

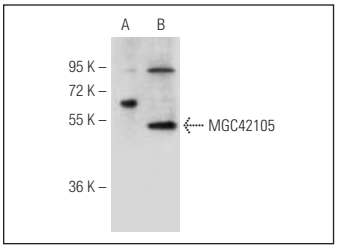
Suitable for use as control antibody for MGC42105 siRNA (h): sc-91764, MGC42105 shRNA Plasmid (h): sc-91764-SH and MGC42105 shRNA (h) Lentiviral Particles: sc-91764-V.

Molecular Weight of MGC42105: 50 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



MGC42105 (N-20): sc-130171. Western blot analysis of MGC42105 expression in 293 showing nontransfected (**A**) and transfected (**B**) whole cell lysate.

PROTOCOLS

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