## SANTA CRUZ BIOTECHNOLOGY, INC.

# MRG1 (N-15): sc-9669



## BACKGROUND

MRG1 (MSG1-related gene 1) is a primary response gene that shares substantial sequence similarity to the carboxy-terminal region of MSG1 (melanocyte-specific gene-1). Both MRG1 and MSG1 contain two conserved domains designated CR1 and CR2, the latter of which is required for transcriptional activation, and they appear to represent a unique family of transcription factors. MRG1 expression is induced by cytokines, including IL-1 $\alpha$ , IL-9 and GM-CSF, as well as by serum growth factors, and it is regulated by the JAK/Stat pathway. Overexpression of MRG1 induces anchorage-independent growth in soft agar, loss of cell contact inhibition and tumor formation in nude mice, suggesting that MRG1 is a transforming gene with oncogenic properties. A splice variant of MRG1, designated p35srj, is ubiquitously expressed and interacts with the p300-CH1 domain of p300/CBP, where it inhibits the interaction of p300/CBP with hypoxia-inducible factor-1 $\alpha$  (HIF-1 $\alpha$ ) to prevent HIF-1 transactivation.

## CHROMOSOMAL LOCATION

Genetic locus: CITED2 (human) mapping to 6q24.1; Cited2 (mouse) mapping to 10 A2.

## SOURCE

MRG1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of MRG1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-9669 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-9669 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MRG1 (N-15) is recommended for detection of MRG1 of mouse, rat and 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)], 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).

MRG1 (N-15) is also recommended for detection of MRG1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MRG1 siRNA (h): sc-35959, MRG1 siRNA (m): sc-35960, MRG1 shRNA Plasmid (h): sc-35959-SH, MRG1 shRNA Plasmid (m): sc-35960-SH, MRG1 shRNA (h) Lentiviral Particles: sc-35959-V and MRG1 shRNA (m) Lentiviral Particles: sc-35960-V.

MRG1 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MRG1: 24/27 kDa.

Positive Controls: IMR-32 nuclear extract: sc-2148 or IMR-32 cell lysate: sc-2409.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



MRG1 (N-15): sc-9669. Western blot analysis of MRG1 expression in IMR-32 nuclear extract.

## **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 **MRG1 (JA22): sc-21795**, our highly recommended monoclonal alternative to MRG1 (N-15).