MRG1 (S-17): sc-9670



The Power to Question

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 α , 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 α (HIF-1 α) to prevent HIF-1 transactivation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CITED2 (human) mapping to 6q24.1, CITED1 (human) mapping to Xq13.1; Cited2 (mouse) mapping to 10 A2, Cited1 (mouse) mapping to X D.

SOURCE

MRG1 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MRG1 of human 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 μg 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-9670 X, 200 $\mu g/0.1$ ml.

Blocking peptide available for competition studies, sc-9670 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRG1 (S-17) is recommended for detection of MRG1 and MSG1 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).

MRG1 (S-17) is also recommended for detection of MRG1 and MSG1 in additional species, including equine, canine, bovine, porcine and avian.

MRG1 (S-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MRG1: 24/27 kDa.

Positive Controls: 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™ 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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.



Try **MRG1 (JA22):** sc-21795, our highly recommended monoclonal alternative to MRG1 (S-17).

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