



MIER3 (S-13): sc-132345

BACKGROUND

The mesoderm induction early response (MIER) protein family is also known as fibroblast growth factor (FGF)-regulated immediate-early protein family. Activated by FGF, it is likely that the MIER proteins may play a significant role in FGF-regulated cellular activities, suggesting a potential influence in the progression of certain cancers. MIER proteins contain one SANT domain, a domain that has been characterized to be involved in transcriptional activation and repression, and one ELM2 domain, a domain which was first characterized in EGL-27, a gene that is critically involved in embryonic patterning of *C. elegans*. Mesoderm induction early response protein 3 (MIER3) is a 550 amino acid protein that is localized to the nucleus and primarily functions as a transcriptional repressor. There are five known isoforms of MIER3 that are produced as a result of alternative splicing.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MIER3 (human) mapping to 5q11.2; Mier3 (mouse) mapping to 13 D2.2.

RESEARCH USE

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

SOURCE

MIER3 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MIER3 of human origin.

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-132345 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MIER3 (S-13) is recommended for detection of MIER3 isoforms 1, 2, 3, 4 and 5 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); non cross-reactive with MIER1 or MIER2.

Suitable for use as control antibody for MIER3 siRNA (h): sc-91893, MIER3 siRNA (m): sc-149431, MIER3 shRNA Plasmid (h): sc-91893-SH, MIER3 shRNA Plasmid (m): sc-149431-SH, MIER3 shRNA (h) Lentiviral Particles: sc-91893-V and MIER3 shRNA (m) Lentiviral Particles: sc-149431-V.

Molecular Weight of MIER3: 61 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) 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.

STORAGE

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

PROTOCOLS

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