

EMG1 (S-12): sc-132665

BACKGROUND

Ribosomes, the organelles that catalyze protein synthesis, are composed of a small subunit (40S) and a large subunit (60S) that consist of over 80 distinct ribosomal proteins. Mammalian ribosomal proteins are encoded by multigene families that contain processed pseudogenes and one functional intron-containing gene within their coding regions. EMG1, also known as C2F, NEP1 or Grcc2f, is a 244 amino acid protein that is thought to be involved in ribosome biogenesis. Localized to the nucleolus, EMG1 participates in pre-18S rRNA processing and may play an important role in the assembly of the small ribosomal subunit, possibly controlling methylation during ribosome synthesis. In yeast, a loss of Emg1 function has been shown to result in cell death, suggesting that proper EMG1 function is required for cell viability.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: EMG1 (human) mapping to 12p13.31; Emg1 (mouse) mapping to 6 F2.

SOURCE

EMG1 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EMG1 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132665 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EMG1 (S-12) is recommended for detection of EMG1 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).

Suitable for use as control antibody for EMG1 siRNA (h): sc-96094, EMG1 siRNA (m): sc-144639, EMG1 shRNA Plasmid (h): sc-96094-SH, EMG1 shRNA Plasmid (m): sc-144639-SH, EMG1 shRNA (h) Lentiviral Particles: sc-96094-V and EMG1 shRNA (m) Lentiviral Particles: sc-144639-V.

Molecular Weight of EMG1: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

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.