

# Ribosomal Protein S14 (C-14): sc-68233

## 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. Ribosomal Protein S14, also known as RPS14 or EMTB, is a 151 amino acid component of the small ribosomal 40S subunit. Localized to the cytoplasm, Ribosomal Protein S14 is a member of the S11P family of ribosomal proteins and is highly conserved among several species. Defects in the gene encoding Ribosomal Protein S14 may cause resistance to emetine, a protein synthesis inhibitor found in Chinese hamster ovary cells. Multiple isoforms of this protein exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RPS14 (human) mapping to 5q33.1; Rps14 (mouse) mapping to 18 E1.

## SOURCE

Ribosomal Protein S14 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RPS14 of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68233 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Ribosomal Protein S14 (C-14) is recommended for detection of Ribosomal Protein S14 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); also recommended for detection of MGC87895 of human origin and EG545121 of mouse origin.

Ribosomal Protein S14 (C-14) is also recommended for detection of Ribosomal Protein S14 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Ribosomal Protein S14 siRNA (h): sc-62966, Ribosomal Protein S14 siRNA (m): sc-62967, Ribosomal Protein S14 shRNA Plasmid (h): sc-62966-SH, Ribosomal Protein S14 shRNA Plasmid (m): sc-62967-SH, Ribosomal Protein S14 shRNA (h) Lentiviral Particles: sc-62966-V and Ribosomal Protein S14 shRNA (m) Lentiviral Particles: sc-62967-V.

Molecular Weight of Ribosomal Protein S14: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or LADMAC whole cell lysate: sc-364189.

## 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.


 MONOS  
 Satisfaction  
 Guaranteed

Try **Ribosomal Protein S14 (3G5): sc-293478**, our highly recommended monoclonal alternative to Ribosomal Protein S14 (C-14).