

# Ribosomal Protein S9 (E-3): sc-390614

## 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 S9 (RPS9), also known as 40S Ribosomal Protein S9, is a 194 amino acid protein that contains one S4 RNA-binding domain and belongs to the Ribosomal Protein S4P family. Ribosomal Protein S9 localizes to cytoplasm and has been identified as part of an mRNP granule complex. Like most Ribosomal Proteins, Ribosomal Protein S9 exists as multiple processed pseudogenes that are scattered throughout the genome. The gene encoding Ribosomal Protein S9 maps to human chromosome 19q13.42.

## REFERENCES

- Frigerio, J.M., et al. 1995. Cloning, sequencing and expression of the L5, L21, L27a, L28, S5, S9, S10 and S29 human ribosomal protein mRNAs. *Biochim. Biophys. Acta* 1262: 64-68.
- Frigerio, J.M., et al. 1995. Analysis of 2166 clones from a human colorectal cancer cDNA library by partial sequencing. *Hum. Mol. Genet.* 4: 37-43.
- Kenmochi, N., et al. 1998. A map of 75 human ribosomal protein genes. *Genome Res.* 8: 509-523.
- Online Mendelian Inheritance in Man, OMIM™. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 603631. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Yu, Z., et al. 2000. Identification of genes responsive to BPDE treatment in HeLa cells using cDNA expression assays. *Environ. Mol. Mutagen.* 36: 201-205.
- Yoshihama, M., et al. 2002. The human ribosomal protein genes: sequencing and comparative analysis of 73 genes. *Genome Res.* 12: 379-390.

## CHROMOSOMAL LOCATION

Genetic locus: RPS9 (human) mapping to 19q13.42; Rps9 (mouse) mapping to 7 A1.

## SOURCE

Ribosomal Protein S9 (E-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 8-32 near the N-terminus of Ribosomal Protein S9 of human origin.

## PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390614 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## RESEARCH USE

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

## APPLICATIONS

Ribosomal Protein S9 (E-3) is recommended for detection of Ribosomal Protein S9 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Ribosomal Protein S9 (E-3) is also recommended for detection of Ribosomal Protein S9 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ribosomal Protein S9 siRNA (h): sc-97681, Ribosomal Protein S9 siRNA (m): sc-152954, Ribosomal Protein S9 shRNA Plasmid (h): sc-97681-SH, Ribosomal Protein S9 shRNA Plasmid (m): sc-152954-SH, Ribosomal Protein S9 shRNA (h) Lentiviral Particles: sc-97681-V and Ribosomal Protein S9 shRNA (m) Lentiviral Particles: sc-152954-V.

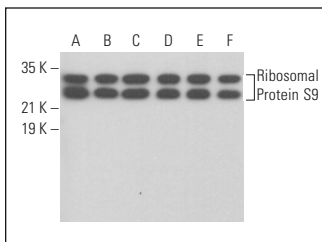
Molecular Weight of Ribosomal Protein S9: 23 kDa.

Positive Controls: A2058 whole cell lysate: sc-364178, HeLa whole cell lysate: sc-2200 or IMR-32 cell lysate: sc-2409.

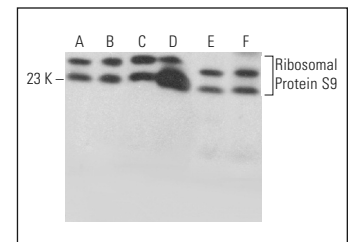
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Ribosomal Protein S9 (E-3): sc-390614. Western blot analysis of Ribosomal Protein S9 expression in COLO 205 (A), IMR-32 (B), HeLa (C), A2058 (D), C2C12 (E) and EOC 20 (F) whole cell lysates.



Ribosomal Protein S9 (E-3): sc-390614. Western blot analysis of Ribosomal Protein S9 expression in COLO 205 (A), Daudi (B), RAW 264.7 (C) and SW480 (D) whole cell lysates and human tonsil (E) and mouse lymph node (F) tissue extracts.

## STORAGE

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