

# Ribosomal Protein S29 (3G9): sc-517071

## 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 S29, also known as RPS29, is a 56 amino acid ribosomal protein that exists as a component of the 40S subunit and contains one C2-C2 zinc finger-like domain. Localized to the cytoplasm, Ribosomal Protein S29 binds zinc as a cofactor and is thought to enhance the tumor suppressor activity of Rap 1A, possibly playing an indirect role in tumor suppression. Like most ribosomal proteins, Ribosomal Protein S29 exists as multiple processed pseudogenes that are scattered throughout the genome.

## REFERENCES

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- Kondoh, N., et al. 1996. The S29 Ribosomal Protein increases tumor suppressor activity of K rev-1 gene on v-K ras-transformed NIH3T3 cells. *Biochim. Biophys. Acta* 1313: 41-46.
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- Bortoluzzi, S., et al. 2001. Differential expression of genes coding for ribosomal proteins in different human tissues. *Bioinformatics* 17: 1152-1157.
- Zhou, Z.D., et al. 2003. Low content of protein S29 in ribosomes of human lung cancer cell line A549: detected by two-dimensional electrophoresis. *Protein Pept. Lett.* 10: 91-97.

## CHROMOSOMAL LOCATION

Genetic locus: RPS29 (human) mapping to 14q21.3; Rps29 (mouse) mapping to 12 C2.

## SOURCE

Ribosomal Protein S29 (3G9) is a mouse monoclonal antibody raised against amino acids 1-56 representing partial length Ribosomal Protein S29 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Ribosomal Protein S29 (3G9) is recommended for detection of Ribosomal Protein S29 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

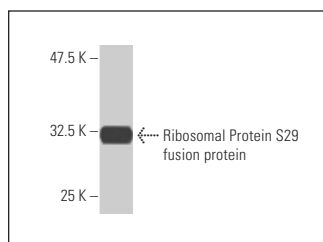
Suitable for use as control antibody for Ribosomal Protein S29 siRNA (h): sc-92092, Ribosomal Protein S29 siRNA (m): sc-152949, Ribosomal Protein S29 shRNA Plasmid (h): sc-92092-SH, Ribosomal Protein S29 shRNA Plasmid (m): sc-152949-SH, Ribosomal Protein S29 shRNA (h) Lentiviral Particles: sc-92092-V and Ribosomal Protein S29 shRNA (m) Lentiviral Particles: sc-152949-V.

Molecular Weight of Ribosomal Protein S29: 7 kDa.

## 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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (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 S29 (3G9): sc-517071. Western blot analysis of human recombinant Ribosomal Protein S29 fusion protein.

## STORAGE

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

## RESEARCH USE

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