



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Anti-Ribosomal Protein L26 (N-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **R0655**

Product Description

Anti-Ribosomal Protein L26 (N-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 1-17 of human ribosomal protein L26 (GeneID: 6154), conjugated to KLH via a C-terminal added cysteine residue. The sequence is conserved in human, rat, and mouse. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Ribosomal Protein L26 (N-terminal) specifically recognizes human Ribosomal Protein L26. Applications include immunoblotting (17 kDa), immunoprecipitation, and immunofluorescence. Staining of the ribosomal protein L26 band in immunoblotting is specifically inhibited by the immunizing peptide.

Ribosomes are the machinery responsible for protein translation in every living cell. Eukaryotic and prokaryotic ribosomes are very similar in design and function. Ribosomes consist of a small subunit (40S, in eukaryotes) and a large subunit (60S, in eukaryotes). Together these subunits are composed of four RNA species (rRNAs) and ~80 structurally distinct proteins. Most of the ribosomal proteins are located at the surface of the ribosome while the rRNA components make up the central core. rRNAs play a central part in the ribosome catalytic activities. The proteins' main function is to hold the ribosomal RNA in place so that it could carry out its catalytic activity.¹ However, being at the surface of the ribosome, the proteins are in the best possible position to mediate also the many interactions of the ribosome.² Ribosomal proteins are implicated, for example, in mRNA recognition, tRNA recognition and decoding and nuclear export. Ribosomal protein L26 is one of the large ribosomal subunit proteins. It was shown together with nucleolin to bind to the 5' untranslated region of p53 mRNA and to control p53 translation and induction after DNA damage.³

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.5-1 µg/mL is recommended using HEK-293T cell extracts.

Immunoprecipitation: 5-10 µg is recommended using HEK-293T cell lysates.

Indirect immunofluorescence: a working concentration of 5-10 µg/mL is recommended using paraformaldehyde-fixed HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Ban, N., et al., *Science*, **289**, 905-920 (2000).
2. Brodersen, D.E., and Nissen, P., *FEBS J.*, **272**, 2098-2108 (2005).
3. Takagi, M., et al., *Cell*, **123**, 49-63(2005).

YK,NV,KAA,PHC 01/07-1

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.