

Ribosomal Protein L17 (C-8): sc-515904

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 L17, also known as RPL17, rPL23, PD-1 or 60S Ribosomal Protein L17, is a 184 amino acid protein that is expressed in pancreas, lung, colon, cystic duct, gall bladder, kidney and liver and belongs to the Ribosomal Protein L22P family. Localized to the cytoplasm, it has been suggested that Ribosomal Protein L17 may influence sexual differentiation of Area X and RA, potentially regulating the genesis and/or survival of neurons of juvenile zebra finches.

CHROMOSOMAL LOCATION

Genetic locus: RPL17 (human) mapping to 18q21.1; Rpl17 (mouse) mapping to 18 E3.

SOURCE

Ribosomal Protein L17 (C-8) is a mouse monoclonal antibody raised against amino acids 1-160 mapping at the N-terminus of Ribosomal Protein L17 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Ribosomal Protein L17 (C-8) is available conjugated to agarose (sc-515904 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515904 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515904 PE), fluorescein (sc-515904 FITC), Alexa Fluor® 488 (sc-515904 AF488), Alexa Fluor® 546 (sc-515904 AF546), Alexa Fluor® 594 (sc-515904 AF594) or Alexa Fluor® 647 (sc-515904 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515904 AF680) or Alexa Fluor® 790 (sc-515904 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Ribosomal Protein L17 (C-8) is recommended for detection of Ribosomal Protein L17 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).

Suitable for use as control antibody for Ribosomal Protein L17 siRNA (h): sc-76399, Ribosomal Protein L17 siRNA (m): sc-152898, Ribosomal Protein L17 shRNA Plasmid (h): sc-76399-SH, Ribosomal Protein L17 shRNA Plasmid (m): sc-152898-SH, Ribosomal Protein L17 shRNA (h) Lentiviral Particles: sc-76399-V and Ribosomal Protein L17 shRNA (m) Lentiviral Particles: sc-152898-V.

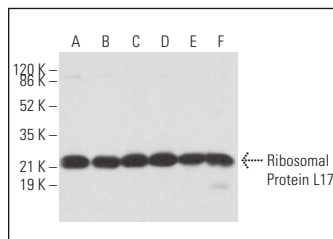
Molecular Weight of Ribosomal Protein L17: 22 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, Neuro-2A whole cell lysate: sc-364185 or NIH/3T3 whole cell lysate: sc-2210.

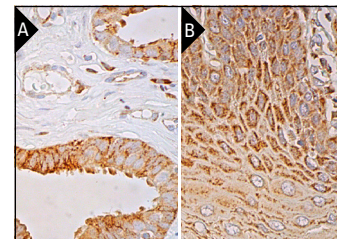
STORAGE

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

DATA



Ribosomal Protein L17 (C-8): sc-515904. Western blot analysis of Ribosomal Protein L17 expression in RAW 264.7 (A), Neuro-2A (B), NIH/3T3 (C), WEHI-231 (D), BW5147 (E) and MH-S (F) whole cell lysates.



Ribosomal Protein L17 (C-8): sc-515904. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells (A), and of human esophagus tissue showing cytoplasmic staining of squamous epithelial cells (B). Blocked with 0.25X UltraCruz®. Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216.

SELECT PRODUCT CITATIONS

- Park, E.J., et al. 2021. Whole cigarette smoke condensates induce accumulation of Amyloid β precursor protein with oxidative stress in murine astrocytes. *Toxics* 9: 150.
- Qiang, M., et al. 2021. Cockayne syndrome-associated CSA and CSB mutations impair ribosome biogenesis, ribosomal protein stability, and global protein folding. *Cells* 10: 1616.
- Božić, J., et al. 2022. Interactome screening of C9orf72 dipeptide repeats reveals VCP sequestration and functional impairment by polyGA. *Brain* 145: 684-699.
- Liu, Y., et al. 2022. iTRAQ-based proteomic analysis of 17β-estradiol-induced anti-proliferation and apoptosis in mouse thymic epithelial cells by disturbing ribosomal biogenesis. *IUBMB Life* 74: 1094-1114.
- Havkin-Solomon, T., et al. 2023. Translation regulation of specific mRNAs by RPS26 C-terminal RNA-binding tail integrates energy metabolism and AMPK-mTOR signaling. *Nucleic Acids Res.* 51: 4415-4428.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA