

Ribosomal Protein L5 (D-20): sc-103865

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 L5, also known as RPL5 or DBA6, is a 297 amino acid protein required for rRNA maturation that belongs to the Ribosomal Protein L18P family. A component of the 60S subunit, Ribosomal Protein L5 localizes to cytoplasm and nucleolus and binds 5S rRNA to form a stable complex termed 5S ribonucleoprotein particle (RNP), which is essential for nonribosome-associated cytoplasmic 5S rRNA transport into the nucleolus for ribosome assembly. Ribosomal Protein L5 defects may lead to Diamond-Blackfan anemia type 6 (DBA6), a congenital hypoplastic anemia that is characterized by erythroblastopenia and macrocytic anemia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RPL5 (human) mapping to 1p22.1; Rpl5 (mouse) mapping to 5 F.

STORAGE

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

SOURCE

Ribosomal Protein L5 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ribosomal Protein L5 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103865 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ribosomal Protein L5 (D-20) is recommended for detection of Ribosomal Protein L5 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Ribosomal Protein L family members.

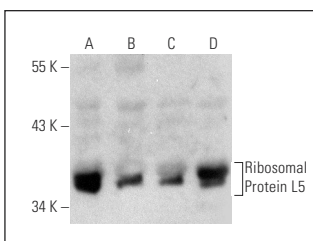
Ribosomal Protein L5 (D-20) is also recommended for detection of Ribosomal Protein L5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ribosomal Protein L5 siRNA (h): sc-78649, Ribosomal Protein L5 siRNA (m): sc-106506, Ribosomal Protein L5 shRNA Plasmid (h): sc-78649-SH, Ribosomal Protein L5 shRNA Plasmid (m): sc-106506-SH, Ribosomal Protein L5 shRNA (h) Lentiviral Particles: sc-78649-V and Ribosomal Protein L5 shRNA (m) Lentiviral Particles: sc-106506-V.

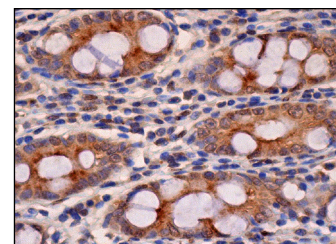
Molecular Weight of Ribosomal Protein L5: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, COLO 320DM cell lysate: sc-2226 or Caki-1 cell lysate: sc-2224.

DATA



Ribosomal Protein L5 (D-20): sc-103865. Western blot analysis of Ribosomal Protein L5 expression in HeLa (A), COLO 320DM (B), PC-3 (C) and Caki-1 (D) whole cell lysates.



Ribosomal Protein L5 (D-20): sc-103865. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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