

### **Goat Anti-RPS19 Antibody**

Peptide-affinity purified goat antibody Catalog # AF1946a

## **Specification**

## **Goat Anti-RPS19 Antibody - Product Information**

Application WB
Primary Accession P39019

Other Accession NP\_001013, 6223

Reactivity Human

Predicted Mouse, Rat, Dog, Cow

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 16060

## **Goat Anti-RPS19 Antibody - Additional Information**

**Gene ID 6223** 

### **Other Names**

40S ribosomal protein S19, RPS19

#### Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Goat Anti-RPS19 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-RPS19 Antibody - Protein Information**

## Name RPS19 (HGNC:10402)

### **Function**

Component of the small ribosomal subunit (PubMed:<a href="http://www.uniprot.org/citations/23636399" target="\_blank">23636399</a>). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:<a href="http://www.uniprot.org/citations/23636399" target="\_blank">23636399</a>). Required for pre- rRNA processing and maturation of 40S ribosomal subunits (PubMed:<a href="http://www.uniprot.org/citations/16990592" target="\_blank">16990592</a>). Part of the



small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:<a href="http://www.uniprot.org/citations/34516797" target="blank">34516797</a>).

#### **Cellular Location**

Cytoplasm. Nucleus, nucleolus

### **Tissue Location**

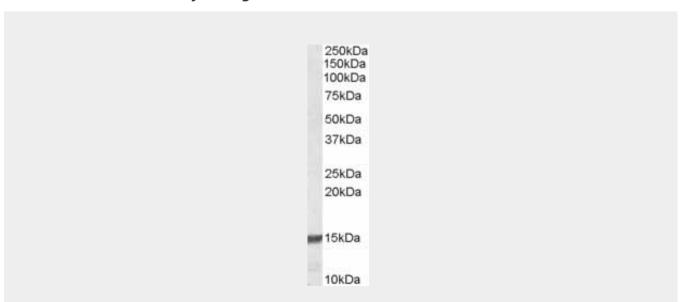
Higher level expression is seen in the colon carcinoma tissue than normal colon tissue

## Goat Anti-RPS19 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Goat Anti-RPS19 Antibody - Images



AF1946a (0.1  $\mu$ g/ml) staining of K562 lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

## Goat Anti-RPS19 Antibody - Background

Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a ribosomal protein that is a component of the 40S subunit. The protein belongs to the S19E family of ribosomal proteins. It is located in the cytoplasm. Mutations in this gene cause Diamond-Blackfan anemia (DBA), a constitutional erythroblastopenia characterized by absent or decreased erythroid precursors, in a subset of patients. This suggests a



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possible extra-ribosomal function for this gene in erythropoietic differentiation and proliferation, in addition to its ribosomal function. Higher expression levels of this gene in some primary colon carcinomas compared to matched normal colon tissues has been observed. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

## Goat Anti-RPS19 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Ribosomal protein S19 binds to its own mRNA with reduced affinity in Diamond-Blackfan anemia. Schuster J, et al. Blood Cells Mol Dis, 2010 Jun 15. PMID 20395159.

Mutations in the ribosomal protein genes in Japanese patients with Diamond-Blackfan anemia. Konno Y, et al. Haematologica, 2010 Aug. PMID 20378560.

A plasma protein indistinguishable from ribosomal protein S19: conversion to a monocyte chemotactic factor by a factor XIIIa-catalyzed reaction on activated platelet membrane phosphatidylserine in association with blood coagulation. Semba U, et al. Am J Pathol, 2010 Mar. PMID 20093496.

Genetic variants in the noncoding region of RPS19 gene in Diamond-Blackfan anemia: potential implications for phenotypic heterogeneity. Cr∏tien A, et al. Am J Hematol, 2010 Feb. PMID 20054847.