

RPS19 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant RPS19.

Catalog # AT3713a

Product Information

Application	WB
Primary Accession	P39019
Other Accession	BC000023
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	3C6
Calculated MW	16060

Additional Information

Gene ID	6223
Other Names	40S ribosomal protein S19, RPS19
Target/Specificity	RPS19 (AAH00023, 1 a.a. ~ 145 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	RPS19 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

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 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.

References

1. Dissecting the transcriptional phenotype of ribosomal protein deficiency: implications for Diamond-Blackfan Anemia. Aspesi A, Pavesi E, Robotti E, Crescitelli R, Boria I, Avondo F, Moniz H, Da Costa L, Mohandas N, Roncaglia P, Ramenghi U, Ronchi A, Gustincich S, Merlin S, Marengo E, Ellis SR, Follenzi A, Santoro C, Dianzani I. *Gene*. 2014 Jul 25;545(2):282-9. doi: 10.1016/j.gene.2014.04.077. Epub 2014 May 15.

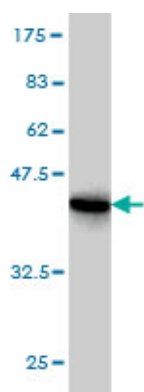
2. p53-Independent Cell Cycle and Erythroid Differentiation Defects in Murine Embryonic Stem Cells Haploinsufficient for Diamond Blackfan Anemia-Proteins: RPS19 versus RPL5. Singh SA, Goldberg TA, Henson AL, Husain-Krautter S, Nihrane A, Blanc L, Ellis SR, Lipton JM, Liu J. *PLoS One*. 2014 Feb 18;9(2):e89098. doi: 10.1371/journal.pone.0089098. eCollection 2014.

3. Differential proteomic analysis in human cells subjected to ribosomal stress. Caterino M, Corbo C, Imperlini E, Armiraglio M, Pavesi E, Aspesi A, Loreni F, Dianzani I, Ruoppolo M. *Proteomics*. 2013 Feb 15. doi: 10.1002/pmic.201200242.

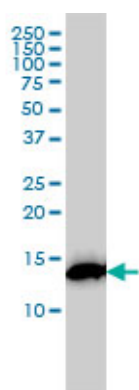
4. Impaired growth, hematopoietic colony formation, and ribosome maturation in human cells depleted of Shwachman-Diamond syndrome protein SBDS. Sezgin G, Henson AL, Nihrane A, Singh S, Wattenberg M, Alard P, Ellis SR, Liu JM. *Pediatr Blood Cancer*. 2012 Sep 19. doi: 10.1002/pbc.24300.

5. Enhanced alternative splicing of the FLVCR1 gene in Diamond Blackfan anemia disrupts FLVCR1 expression and function that are critical for erythropoiesis. Rey MA, Duffy SP, Brown JK, Kennedy JA, Dick JE, Dror Y, Tailor CS. *Haematologica*. 2008 Nov;93(11):1617-26. Epub 2008 Sep 24.

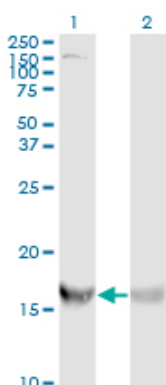
Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (41.69 KDa) .



RPS19 monoclonal antibody (M01), clone 3C6 Western Blot analysis of RPS19 expression in K-562 ((Cat # AT3713a)



Western Blot analysis of RPS19 expression in transfected 293T cell line by RPS19 monoclonal antibody (M01), clone 3C6.

Lane 1: RPS19 transfected lysate (16.1 KDa).
Lane 2: Non-transfected lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.