10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RPS5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RPS5.
Catalog # AT3718a

Product Information

Application	WB
Primary Accession	P46782
Other Accession	NM_001009
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3G3
Calculated MW	22876

Additional Information

Gene ID	6193
Other Names	40S ribosomal protein S5, 40S ribosomal protein S5, N-terminally processed, RPS5
Target/Specificity	RPS5 (NP_001000, 106 a.a. ~ 204 a.a) partial 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	RPS5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

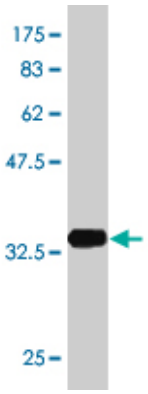
Background

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 S7P family of ribosomal proteins. It is located in the cytoplasm. Variable expression of this gene in colorectal cancers compared to adjacent normal tissues has been observed, although no correlation between the level of expression and the severity of the disease has been found. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

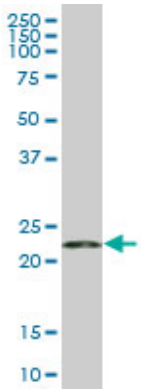
References

[Mutual effect of human ribosomal proteins S5 and S16 on their binding with 18S rRNA fragment 1203-1236/1521-1698] Ian'shina DD, et al. Mol Biol (Mosk), 2009 Jul-Aug. PMID 19807034.Nucleophosmin serves as a rate-limiting nuclear export chaperone for the Mammalian ribosome. Maggi LB Jr, et al. Mol Cell Biol, 2008 Dec. PMID 18809582.Ribosomal position and contacts of mRNA in eukaryotic translation initiation complexes. Pisarev AV, et al. EMBO J, 2008 Jun 4. PMID 18464793.Roles of the negatively charged N-terminal extension of Saccharomyces cerevisiae ribosomal protein S5 revealed by characterization of a yeast strain containing human ribosomal protein S5. Galkin O, et al. RNA, 2007 Dec. PMID 17901157.Mass spectrometric analysis of the human 40S ribosomal subunit: native and HCV IRES-bound complexes. Yu Y, et al. Protein Sci, 2005 Jun. PMID 15883184.

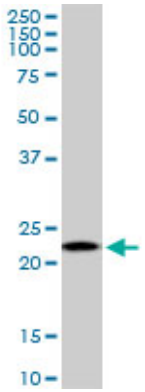
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .

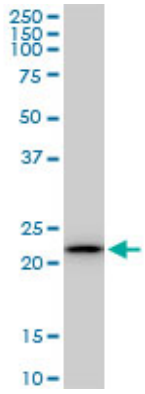


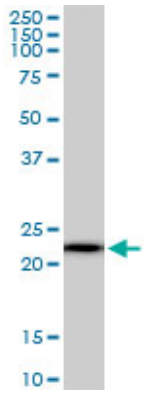
RPS5 monoclonal antibody (M01), clone 3G3. Western Blot analysis of RPS5 expression in HeLa ((Cat # AT3718a)



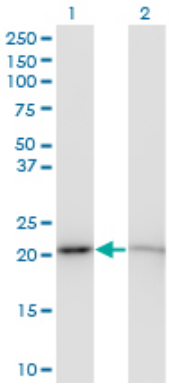
RPS5 monoclonal antibody (M01), clone 3G3. Western Blot analysis of RPS5 expression in PC-12((Cat # AT3718a)

RPS5 monoclonal antibody (M01), clone 3G3. Western Blot analysis of RPS5 expression in Raw 264.7((Cat # AT3718a)





RPS5 monoclonal antibody (M01), clone 3G3. Western Blot analysis of RPS5 expression in NIH/3T3((Cat # AT3718a)



Western Blot analysis of RPS5 expression in transfected 293T cell line by RPS5 monoclonal antibody (M01), clone 3G3.

Lane 1: RPS5 transfected lysate(22.9 KDa).
Lane 2: Non-transfected lysate.