

Rabbit RPS3/Ribosomal Protein S3 Monoclonal Antibody | anti-RPS3 antibody

Anti-RPS3/Ribosomal Protein S3 Rabbit Monoclonal Antibody

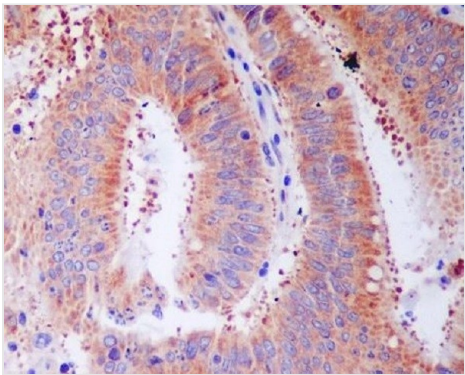
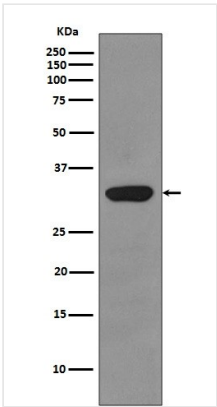
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47064	Rabbit	Human, Mouse, Rat	Western Blot, Immunocytochemistry, Immunohistochemistry, Immunofluorescence

PRODUCT SYNONYMS

RPS3/Ribosomal Protein S3; Monoclonal Antibody; Anti-RPS3/Ribosomal Protein S3 Rabbit Monoclonal Antibody; 40S ribosomal protein S3; 4.2.99.18; RPS3; OK/SW-cl.26; anti-RPS3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	259
Applicable Applications for anti-RPS3 antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), IF (Immunofluorescence)
Immunogen	A synthesized peptide derived from human RPS3
Subcellular Localization	Cytoplasm. Nucleus. Nucleus, nucleolus. Mitochondrion inner membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton, spindle. In normal cells, located mainly in the cytoplasm with small amounts in the nucleus but translocates to the nucleus in cells undergoing apoptosis (By similarity). Nuclear translocation is induced by DNA damaging agents such as hydrogen peroxide (PubMed: 17560175). Accumulates in the mitochondrion in response to increased ROS levels (PubMed: 23911537). Localizes to the spindle during mitosis (PubMed: 23131551). Localized in cytoplasmic mRNP granules containing untranslated mRNAs (PubMed: 17289661).
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded human colon cancer, using RPS3 Antibody(AAA47064)RPS3 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-RPS3 Antibody (AAA47064)overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

WB (Western Blot)
Western blot analysis of RPS3 expression in HepG2 cell lysate (AAA47064).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-RPS3 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RPS3

ADDITIONAL INFORMATION

Related Product Information for anti-RPS3 antibody	Involved in translation as a component of the 40S small ribosomal subunit (PubMed: 8706699). Has endonuclease activity and plays a role in repair of damaged DNA (PubMed: 7775413). Cleaves phosphodiester bonds of DNAs containing altered bases with broad specificity and cleaves supercoiled DNA more efficiently than relaxed DNA (PubMed: 15707971). Displays high binding affinity for 7,8-dihydro-8-oxoguanine (8-oxoG), a common DNA lesion caused by reactive oxygen species (ROS) (PubMed: 14706345). Has also been shown to bind with similar affinity to intact and damaged DNA (PubMed: 18610840). Stimulates the N-glycosylase activity of the base excision protein OGG1 (PubMed: 15518571). Enhances the uracil excision activity of UNG1 (PubMed: 18973764). Also stimulates the cleavage of the phosphodiester backbone by APEX1 (PubMed: 18973764). When located in the mitochondrion, reduces cellular ROS levels and mitochondrial DNA damage (PubMed: 23911537). Has also been shown to negatively regulate DNA repair in cells exposed to hydrogen peroxide (PubMed: 17049931). Plays a role in regulating transcription as part of the NF-kappa-B p65-p50 complex where it binds to the RELA/p65 subunit, enhances binding of the complex to DNA and promotes transcription of target genes (PubMed: 18045535). Represses its own translation by binding to its cognate mRNA (PubMed: 20217897). Binds to and protects TP53/p53 from MDM2-mediated ubiquitination (PubMed: 19656744). Involved in spindle formation and chromosome movement during mitosis by regulating microtubule polymerization (PubMed: 23131551). Involved in induction of apoptosis through its role in activation of CASP8 (PubMed: 14988002). Induces neuronal apoptosis by interacting with the E2F1 transcription factor and acting synergistically with it to up-regulate pro-apoptotic proteins BCL2L11/BIM and HRK/Dp5 (PubMed: 20605787). Interacts with TRADD following exposure to UV radiation and induces apoptosis by caspase-dependent JNK activation (PubMed: 22510408).
Product Categories/Family for anti-RPS3 antibody	Cell Biology; Apoptosis; Intracellular; Associated Proteins; Epigenetics and Nuclear Signaling; DNA/RNA; DNA Damage & Repair; DNA Damage Response; Translation; Ribosome

NCBI AND UNIPROT INFORMATION

NCBI GI #	15718687
NCBI GeneID	6188
NCBI Accession #	NP_000996.2
NCBI GenBank Nucleotide #	NM_001005.4
UniProt Accession #	P23396; Q498B5; Q8NI95; B2R7N5; J3KN86

Molecular Weight	26688 MW
NCBI Official Full Name	40S ribosomal protein S3 isoform 1
NCBI Official Synonym Full Names	ribosomal protein S3
NCBI Official Symbol	RPS3
NCBI Official Synonym Symbols	S3
NCBI Protein Information	40S ribosomal protein S3
UniProt Protein Name	40S ribosomal protein S3
UniProt Gene Name	RPS3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/rps3-ribosomal-protein-s3-antibody-western-blot-immunocytochemistry-immunohistochemistry-immunofluorescence-elisa/47064>