

RPS23 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP18598a**Specification**

RPS23 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P62266](#)**RPS23 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 6228**Other Names**

40S ribosomal protein S23, RPS23

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RPS23 Antibody (N-term) Blocking Peptide - Protein Information**Name** RPS23**Function**

Component of the ribosome, a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed: [28257692](http://www.uniprot.org/citations/28257692), PubMed: [23636399](http://www.uniprot.org/citations/23636399), PubMed: [25957688](http://www.uniprot.org/citations/25957688), PubMed: [25901680](http://www.uniprot.org/citations/25901680)). The small ribosomal subunit (SSU) binds messenger RNAs (mRNAs) and translates the encoded message by selecting cognate aminoacyl-transfer RNA (tRNA) molecules (PubMed: [23636399](http://www.uniprot.org/citations/23636399), PubMed: [25957688](http://www.uniprot.org/citations/25957688), PubMed: [25901680](http://www.uniprot.org/citations/25901680)). The large subunit (LSU) contains the ribosomal catalytic site termed the peptidyl transferase center (PTC), which catalyzes the formation of peptide bonds, thereby polymerizing the amino acids delivered by tRNAs into a polypeptide chain (PubMed: [23636399](http://www.uniprot.org/citations/23636399), PubMed: [25957688](http://www.uniprot.org/citations/25957688), PubMed: [25901680](http://www.uniprot.org/citations/25901680)). The nascent polypeptides leave the ribosome through a tunnel in the LSU and interact with protein factors that function in enzymatic processing, targeting, and the membrane insertion of nascent chains at the

exit of the ribosomal tunnel (PubMed:23636399, PubMed:25957688, PubMed:25901680). Plays an important role in translational accuracy (PubMed:28257692). 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:34516797).

Cellular Location

Cytoplasm, cytosol. Cytoplasm Rough endoplasmic reticulum {ECO:0000250|UniProtKB:Q6SA96}. Nucleus, nucleolus. Note=Detected on cytosolic polysomes (PubMed:25957688). Detected in ribosomes that are associated with the rough endoplasmic reticulum (By similarity) {ECO:0000250|UniProtKB:Q6SA96, ECO:0000269|PubMed:25957688}

RPS23 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RPS23 Antibody (N-term) Blocking Peptide - Images

RPS23 Antibody (N-term) Blocking Peptide - 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 S12P family of ribosomal proteins. It is located in the cytoplasm. The protein shares significant amino acid similarity with *S. cerevisiae* ribosomal protein S28. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome. [provided by RefSeq].

RPS23 Antibody (N-term) Blocking Peptide - References

Yu, Y., et al. Protein Sci. 14(6):1438-1446(2005) Andersen, J.S., et al. Nature 433(7021):77-83(2005) Kapp, L.D., et al. Annu. Rev. Biochem. 73, 657-704 (2004) :Sampath, P., et al. Mol. Cell. Biol. 23(5):1509-1519(2003) Kenmochi, N., et al. Genome Res. 8(5):509-523(1998)