

RPS6 Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP20175a**Specification**

RPS6 Blocking Peptide (N-term) - Product Information

Primary Accession [P62753](#)
Other Accession [P62755](#), [P62754](#), [Q4R4K6](#), [Q5E995](#),
[NP_001001.2](#)

RPS6 Blocking Peptide (N-term) - Additional Information

Gene ID 6194

Other Names

40S ribosomal protein S6, Phosphoprotein NP33, RPS6

Target/Specificity

The synthetic peptide sequence is selected from aa 14-27 of HUMAN RPS6

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.

RPS6 Blocking Peptide (N-term) - Protein Information

Name RPS6 {ECO:0000303|PubMed:29563586, ECO:0000312|HGNC:HGNC:10429}

Function

Component of the 40S small ribosomal subunit (PubMed:8706699, PubMed:23636399). Plays an important role in controlling cell growth and proliferation through the selective translation of particular classes of mRNA (PubMed:17220279). 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. Nucleus, nucleolus

RPS6 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

RPS6 Blocking Peptide (N-term) - Images**RPS6 Blocking Peptide (N-term) - 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 cytoplasmic ribosomal protein that is a component of the 40S subunit. The protein belongs to the S6E family of ribosomal proteins. It is the major substrate of protein kinases in the ribosome, with subsets of five C-terminal serine residues phosphorylated by different protein kinases. Phosphorylation is induced by a wide range of stimuli, including growth factors, tumor-promoting agents, and mitogens. Dephosphorylation occurs at growth arrest. The protein may contribute to the control of cell growth and proliferation through the selective translation of particular classes of mRNA. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

RPS6 Blocking Peptide (N-term) - References

Maggi, L.B. Jr., et al. Mol. Cell. Biol. 28(23):7050-7065(2008)
Fujita, K., et al. Acta Neuropathol. 116(4):439-445(2008)
Robledo, S., et al. RNA 14(9):1918-1929(2008)
Glover, E.I., et al. Am. J. Physiol. Regul. Integr. Comp. Physiol. 295 (2), R604-R610 (2008) :
Ma, X.M., et al. Cell 133(2):303-313(2008)