

EMG1 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP11129c

Specification

EMG1 Antibody (Center) Blocking peptide - Product Information

Primary Accession

EMG1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 10436

Other Names

Ribosomal RNA small subunit methyltransferase NEP1, 211-, 18S rRNA (pseudouridine(1248)-N1)-methyltransferase, 18S rRNA Psi1248 methyltransferase, Nucleolar protein EMG1 homolog, Protein C2f, Ribosome biogenesis protein NEP1, EMG1 {ECO:0000303|PubMed:19463982}

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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.

EMG1 Antibody (Center) Blocking peptide - Protein Information

Name EMG1 {ECO:0000303|PubMed:19463982}

Function

S-adenosyl-L-methionine-dependent pseudouridine N(1)- methyltransferase that methylates pseudouridine at position 1248 (Psi1248) in 18S rRNA. Involved the biosynthesis of the hypermodified N1-methyl-N3-(3-amino-3-carboxypropyl) pseudouridine (m1acp3-Psi) conserved in eukaryotic 18S rRNA. Is not able to methylate uridine at this position (PubMed:20047967). Has also an essential role in 40S ribosomal subunit biogenesis independent on its methyltransferase activity, facilitating the incorporation of ribosomal protein S19 during the formation of pre-ribosomes (By similarity). 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/a>).

Cellular Location



Nucleus, nucleolus

EMG1 Antibody (Center) Blocking peptide - Protocols

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

• Blocking Peptides

EMG1 Antibody (Center) Blocking peptide - Images

EMG1 Antibody (Center) Blocking peptide - Background

This gene encodes an essential, conserved eukaryotic protein involved in ribosome biogenesis. In yeast, the related protein is a component of the small subunit processome and is essential for biogenesis of the ribosomal 40S subunit. A mutation in this gene has been associated with Bowen-Conradi syndrome.

EMG1 Antibody (Center) Blocking peptide - References

Armistead, J., et al. Am. J. Hum. Genet. 84(6):728-739(2009)Lamesch, P., et al. Genomics 89(3):307-315(2007)Lamont, R.E., et al. Am. J. Med. Genet. A 132A (2), 136-143 (2005):Bernstein, K.A., et al. Eukaryotic Cell 3(6):1619-1626(2004)Eschrich, D., et al. Curr. Genet. 40(5):326-338(2002)