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

EMG1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP11129c

Specification

EMG1 Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	Q92979
Other Accession	O35130, NP_006322.4
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**26720**
Antigen Region	**104-133**

EMG1 Antibody (Center) - 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}

Target/Specificity
This EMG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-133 amino acids from the Central region of human EMG1.

Dilution
WB~~1:1000
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
EMG1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EMG1 Antibody (Center) - Protein Information

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

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).

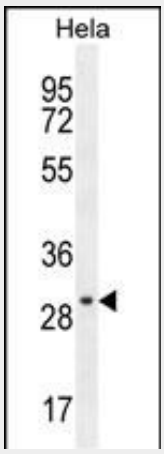
Cellular Location
Nucleus, nucleolus

EMG1 Antibody (Center) - Protocols

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

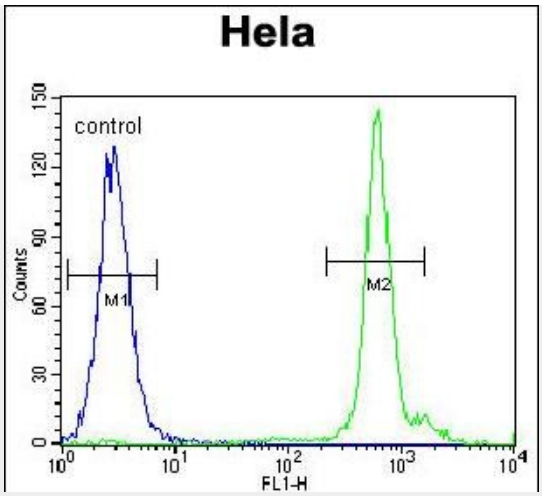
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EMG1 Antibody (Center) - Images



EMG1 Antibody (Center) (Cat. #AP11129c) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the EMG1 antibody detected the EMG1 protein (arrow).

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



EMG1 Antibody (Center) (Cat. #AP11129c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EMG1 Antibody (Center) - 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) - 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)