



Anti-N. gruberi Nucleolus-Like Particles Monoclonal antibody (DMAB9300)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Mouse monoclonal antibody to naegleria gruberi nucleoi nucleolus-like particles.
Target	N. gruberi Nucleolus-Like Particles
Immunogen	nucleolus-like particles (NLP)
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	N. gruberi
Purification	Unpurified
Conjugate	Unconjugated
Applications	IH, WB, IHC, IP
Molecular Weight	Naegleria gruberi, antigens are 125 kDa, 74 kDa, 60 kDa, 35 kDa, and 24 kDa. Saccharomyces cerevisiae, antigens are 96 kDa, 72 kDa and 58 kDa. Mouse (mammalian cells), antigen is 72 kDa. Caenorhabditis elegans, antigens are 66 kDa and 38 kDa.
Format	Supernatant
Preservative	None
Storage	-20 °C, Avoid freeze / thaw cycles

BACKGROUND

Introduction

Nucleoli, the sites of rRNA synthesis, rRNA processing, and the assembly of ribosomes, are dynamic organelles that, in most cells, disperse and reform during mitosis. The mechanisms that regulate nucleolar formation are unknown as is the relationship between nucleolar morphology and the pathway of ribosome biogenesis. In this report we describe the in vitro formation of nucleolus-like particles (NLPs) from soluble extracts of nucleoli. NLPs, which reached sizes comparable to nucleoli (1-3 microns), were found to contain 40% of the nucleolar DNA, RNA, and protein. The ultrastructure of NLPs resembled that of a number of in vivo structures including compact nucleoli, prenucleolar bodies, and pseudonucleoli. The particles were composed of two morphologically distinct regions. The core resembled the dense fibrillar component (DFC) of nucleoli while the cortex resembled the granular component (GC) of nucleoli. The cortex of NLPs contained numerous 15-20 nm osmophilic granules that resembled the preribosomes found in the GC of nucleoli. The distribution of nucleolar proteins in NLPs also resembled that in nucleoli.

Keywords

NLP; nucleoli nucleolus-like particles; Nucleoli; nucleolus-like particles
