Nuclear Membrane Antibody [clone AE-5] (V3096)

Catalog No.	Formulation	Size
V3096-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3096-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3096SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Citations (1)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	AE-5
Purity	Protein G affinity chromatography
UniProt	Not Known
Localization	Nuclear membrane
Applications	Immunofluorescence: 0.5-1ug/ml
Limitations	This Nuclear Membrane antibody is available for research use only.



Description

This monoclonal antibody is part of a new panel of reagents, which recognizes subcellular organelles or compartments of human cells. These markers may be useful in identification of these organelles in cells, tissues, and biochemical preparations. It recognizes an antigen associated with the nuclear membrane expressed in human cells. It can be used to stain the nuclear membrane in cell or tissue preparations and can be used as a marker of the nuclear membrane in subcellular fractions. It produces a ring pattern around the nucleus of cells of normal and malignant cells and may be used to stain the nuclear membrane of cells in fixed or frozen tissue sections. It can be used with paraformaldehyde fixed frozen tissue or cell preparations and formalin fixed, paraffin-embedded tissue sections.,The nuclear envelope (also known as the perinuclear envelope, nuclear membrane, nucleolemma or karyotheca) is the double membrane of the nucleus that encloses genetic material in eukaryotic cells. It separates the contents of the nucleus (DNA in particular) from the cytosol (cytoplasm). Numerous nuclear pores are present on the nuclear envelope to facilitate and regulate the exchange of materials (for example, proteins and RNA) between the nucleus and the cytoplasm. The space between the two membranes that make up the nuclear envelope is called the perinuclear space (also called the perinuclear cisterna), and is usually about 20 - 40 nm wide. Each of the two membranes is composed of a lipid bilayer. The outer membrane is continuous with the rough endoplasmic reticulum. The inner membrane is erected upon the nuclear lamina, a network of intermediate filaments made of lamin, that plays a role in mitosis and meiosis. The type of lamins present are A, B1, B2, and C. The nuclear envelope may also play a role in the disposition of chromatin inside the nucleus. The lamina acts as a site of attachment for chromosomes. It also acts like a shield for the nucleus. During prophase in mitosis, the chromatids begin condensing to form chromosomes, and the nuclear envelope begins to disintegrate. During metaphase, the nuclear envelope is completely disintegrated, and the chromosomes can be pulled apart as chromatids by the spindle fibers.

Application Notes

Optimal dilution of the Nuclear Membrane antibody should be determined by the researcher.

Immunogen

Nuclei of myeloid leukemia biopsy cells were used as the immunogen for the Nuclear Membrane antibody.

Storage

Store the Nuclear Membrane antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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