

## Monoclonal Antibody to Nuclear Pore Complex Marker (pan) - Supernatant

<b>Alternate names:</b>	NPC, NUP107, NUP84, Nuclear Pore Complex Proteins, Nuclear stain of multiple gene products including Nup62, Nup133, Nup62
<b>Catalog No.:</b>	AM08256SU-N
<b>Quantity:</b>	0.1 ml
<b>Background:</b>	The Nuclear Pore Complex (NPC) is a very large structure made up of at least 50 different proteins that span the double membrane of the nuclear envelope functioning as a gateway for macromolecular traffic between the cytoplasm and the nucleus (Nakielny and Dreyfuss, 1999). Discrete nuclear pore complex proteins or nucleoporins such as NUP98, NUP180 and p62 have been implicated in autoimmune disease and cancer. Patients with primary biliary cirrhosis (PBC) frequently produce autoantibodies against p62 and NUP180 (Wilken et al., 1993; Neshet et al., 2001) while NUP98 translocations have been found in patients with acute myelogenous leukemia (AML) (Jaju et al. 2001).
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	39C7
<b>Immunogen:</b>	Yeast nuclear preparations.
<b>Format:</b>	<b>State:</b> Concentrated Culture Supernatant <b>Preservatives:</b> 10 mM Sodium Azide
<b>Applications:</b>	<b>Immunofluorescence:</b> 1/50-1/100. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody reacts with a Nuclear Pore Complex protein. Clone 39C7 was one of a series of clones which strongly and specifically labelled the nuclear pore complex.
<b>Species Reactivity:</b>	<b>Tested:</b> Human, Mouse, Rat and Yeast.
<b>Storage:</b>	Store the antibody undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Nakielny S, Dreyfuss G. Transport of proteins and RNAs in and out of the nucleus. Cell. 1999 Dec 23;99(7):677-90. PubMed PMID: 10619422. 2. Wilken N, Kossner U, Senécal JL, Scheer U, Dabauvalle MC. Nup180, a novel nuclear pore complex protein localizing to the cytoplasmic ring and associated fibrils. J Cell Biol. 1993 Dec;123(6 Pt 1):1345-54. PubMed PMID: 8253835. 3. Neshet G, Margalit R, Ashkenazi YJ. Anti-nuclear envelope antibodies: Clinical associations. Semin Arthritis Rheum. 2001 Apr;30(5):313-20. PubMed PMID: 11303304. 4. Jaju RJ, Fidler C, Haas OA, Strickson AJ, Watkins F, Clark K, et al. A novel gene, NSD1, is

fused to NUP98 in the t(5;11)(q35;p15.5) in de novo childhood acute myeloid leukemia. Blood. 2001 Aug 15;98(4):1264-7. PubMed PMID: 11493482.

**Pictures:**

**Figure 1.** HeLa cells were stained with anti-Nuclear Pore Complex antibody (Cat#AM08256SU-N) (Green), and Chicken anti-Vimentin (Cat#AP08764SU-N) (Red).

