

**AM33287PU-S****Monoclonal Antibody to Mitochondria - Purified**

<b>Alternate names:</b>	Mitochondrial Marker
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.2 mg/ml
<b>Background:</b>	Mitochondria are most commonly known as the power plants of the cell as they produce ATP, but they are also involved in many other important cellular processes such as cell signaling, growth and differentiation (McBride et al., 2006). In addition, mitochondria have been shown to play a role in apoptosis (Green 1998).
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	SPM198
<b>Immunogen:</b>	Semi-purified mitochondrial preparation.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction from Bioreactor Concentrate <b>Purification:</b> Protein A/G Chromatography <b>Buffer System:</b> 10mM PBS <b>Preservatives:</b> 0.05% Sodium Azide <b>Stabilizers:</b> 0.05% BSA
<b>Applications:</b>	<b>Western Blot:</b> 0.25-0.5 µg/ml. <b>Immunofluorescence:</b> 0.5-1 µg/ml. <b>Immunoprecipitation:</b> 0.5-1 µg/500 µg protein lysate. <b>Immunohistochemistry on Formalin-Fixed Paraffin Sections:</b> 0.5-1 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH 8.5-9.5, for 10-20 min followed by cooling at RT for 20 minutes. <b>Recommended Positive Control:</b> HeLa or HepG2 cells, Hepatic carcinoma. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	60kDa
<b>Specificity:</b>	This Monoclonal recognizes a 60kDa antigen associated with the mitochondria in human cells. It can be used to stain mitochondria in cell or tissue preparations and can be used as a mitochondrial marker in subcellular fractions. It produces a spaghetti-like pattern in normal and malignant cells. This antibody is an excellent marker for human cells in xenographic model research. It reacts specifically with human cells, including neurons and embryonic stem cells. <b>Cellular Localization:</b> Mitochondria in cytoplasm. <b>Negative Species:</b> Mouse and Rat.
<b>Species Reactivity:</b>	<b>Tested:</b> Human.

**Storage:** Store undiluted at 2-8°C.  
**DO NOT FREEZE!**  
Shelf life: one year from despatch.

**General Readings:** 1. Epstein, Alan L. and Clevenger, Charles V. In: Progress in Nonhistone Protein Research, Vol. 1, Isaac Bekhor, Ed. CRC Press, Boca Raton, FL, pp. 117-137, 1985.

**Pictures:** Formalin-fixed, paraffin-embedded human Pancreas stained with Mitochondria Monoclonal Antibody Cat.-No AM33287PU (Clone SPM198).

