

## AM33336PU-S

## Monoclonal Antibody to Mitochondria - Purified

**Alternate names:**

Mitochondrial Marker

**Quantity:**

0.1 mg

**Concentration:**

0.2 mg/ml

**Background:**

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).

**Host / Isotype:**

Mouse / IgG1

**Recommended Isotype Controls:**

SM10P (for use in human samples), AM03095PU-N

**Clone:**

MTC719

**Immunogen:**

Mitochondrial fraction of HeLa cells.

**Format:**

**State:** Liquid purified IgG fraction from Bioreactor Concentrate  
**Purification:** Protein A/G Chromatography  
**Buffer System:** 10mM PBS  
**Preservatives:** 0.05% Sodium Azide  
**Stabilizers:** 0.05% BSA

**Applications:**

**ELISA:** Use BSA Free Antibody for coating.  
**Western Blot:** 0.25-0.5 µg/ml.  
**Flow Cytometry:** 0.5-1 µg/10<sup>6</sup> cells.  
**Immunofluorescence:** 0.5-1 µg/ml.  
**Immunoprecipitation:** 0.5-1 µg/500 µg protein lysate.  
**Immunohistochemistry on Frozen and Formalin-Fixed Sections:** 0.5-1 µg/ml for 30 minutes at RT.  
Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.  
**Recommended Positive Control:** HeLa or HepG2 cells. Hepatic carcinomas.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Molecular Weight:**

60kDa

**Specificity:**

This Monoclonal recognizes a 60kDa antigen associated with the mitochondria in cells. It is a part of a new panel of reagents, which recognizes subcellular organelles or compartments of cells. These markers may be useful in identification of these organelles in cells, tissues, and biochemical preparations. It recognizes an antigen associated with the mitochondria in cells from a wide variety of animals, but not insects and bacteria. It can be used to stain the 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 and may be used to stain mitochondria of cells in fixed or frozen tissue sections. It can also be used with paraformaldehyde fixed frozen tissue or cell preparations.

***Cellular Localization:*** Mitochondria in cytoplasm.

**Negative Species:** Insects or Bacteria.

**Species Reactivity:**

**Tested:** Human. Shows broad species reactivity.

**Storage:**

Store undiluted at 2-8°C.

**DO NOT FREEZE!**

Shelf life: one year from despatch.