

Monoclonal Antibody to Mitochondria - Ig Fraction

Alternate names:	Mitochondrial Marker
Catalog No.:	AM31831PU-N
Quantity:	0.1 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
Clone:	113-1
Immunogen:	Human cell homogenate
Format:	State: Liquid Total IgG fraction Purification: Immunoglobulin Fractionation
Applications:	Western Blot: 1/1,000. Immunofluorescence: 1/800. Immunohistochemistry: 1/800. The antibody works on Acetone fixed and 2% paraformaldehyde fixed cells. The antibody also works for Immunohistochemistry on 2% paraformaldehyde fixed (5-10 minutes) Cryostat sections. Successful use in Immunohistochemistry on Formalin-Fixed, Paraffin-Embedded was reported by some researchers. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Specific for Human Mitochondria in all cell types. 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. It does <u>not</u> react with Mouse or Rat mitochondria.
Species Reactivity:	Tested: Human.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. McBride HM, Neuspiel M, Wasiak S (2006) Mitochondria: More than just a powerhouse. <i>Curr Biol.</i> 16(14):R551-60. 2. Green DR (1998) Apoptotic pathways: the roads to ruin. <i>Cell</i> 94(6):695-8.

Pictures:

Western blot of HeLa lysate showing specific immunolabeling of the ~ 60k mitochondrial protein.

