

AM05216PU-N**Monoclonal Antibody to p110 (mitochondrial membrane protein)
- Purified**

Quantity:	0.1 mg
Concentration:	Lot specific
Background:	P110 is a human mitochondrial protein with a molecular weight of 110 kDa. Close examination of the staining pattern in HeLa and Fanconi's Anemia cells reveal differences in the morphology and organization of mitochondria in these two cell types. The epitope targeted may serve as a valuable marker in the investigation of relationships between mitochondria and other cellular structures in human cells.
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	2G2
Immunogen:	Skeletal fraction of HeLa-S3 cells.
Format:	State: Liquid purified IgG fraction from Ascites Purification: Protein A/G Chromatography Buffer System: PBS Preservatives: 0.08% Sodium Azide
Applications:	Western Blot (2-10 ug/ml) Immunofluorescence. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Reacts with Human and Monkey mitochondria. It does not react with Chicken, Mouse or Rat. After stabilization with Aldehyde- or Alcohol-based fixation protocols that optimize the preservation of cytoskeletal components, the epitope targeted by the 2G2 antibody may serve as a valuable marker in the investigation of relationships between mitochondria and other cellular structures in Human cells. The Mouse monoclonal P110 antibody labels mitochondria in Human cells, as assessed by double staining with either Rhodamine 123 or a polyclonal antibody to mitochondrial matrix HSP-60 proteins. The P110 antigen has an approximate isoelectric point of 6.5 that copartitions with HSP-60 proteins during isolation of mitochondria from HeLa cells. The P110 staining pattern in HeLa and Fanconi's anaemia cells reveals differences in the morphology and organization of mitochondria in these two cell types. In HeLa cells, mitochondria appear as individual tubular compartments of variable length and are closely associated with vimentin filaments, particularly at the periphery of the nucleus. In Fanconi's anaemia cells, mitochondria have a filamentous shape and form an interconnected cytoplasmic reticulum running in parallel with both vimentin filaments and microtubules.

- Storage:** Upon receipt, store undiluted (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.
- Product Citations:** **Originator or purchased from resellers:**
1. Criollo A, Maiuri MC, Tasdemir E, Vitale I, Fiebig AA, Andrews D, et al. Regulation of autophagy by the inositol trisphosphate receptor. *Cell Death Differ.* 2007 May;14(5):1029-39. Epub 2007 Jan 26. PubMed PMID: 17256008.
- General Readings:**
1. Paulin-Levasseur M, Chen G, Larivière C. The 2G2 antibody recognizes an acidic 110-kDa human mitochondrial protein. *Histochem J.* 1998 Sep;30(9):617-25. PubMed PMID: 9870762.