

Anti-human Mitochondrial P110 (2G2)

Product: Anti human 2G2 monoclonal antibody.

Description: 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. 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 co-partitions 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. 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.

Isotype: Mouse IgG1

Clone: 2G2

Application: Western Blot at 2-10 ug/ml. Immunofluorescence staining.

Formulation: Provided as 0.2µm sterile filtered solution in phosphate buffered saline with 0.08% sodium azide.

Presentation: 100 µg IgG purified from ascites at 1 mg/ml.

Immunogen: Skeletal fraction of HeLa-S3 cells

Reactivity: Reacts with human and monkey mitochondria - does not react with chicken, mouse or rat.

Storage: Antibodies should be stored at -20°C. Aliquot to avoid freeze/thaws.

Stability: Antibodies are stable for one year from purchase if stored frozen.

Ordering Information:	Form	Vial Size	Catalog #
	Purified	100 µg	A115M

References:

1. Paulin-Levasseur M; Chen G; Larivière C. The 2G2 antibody recognizes an acidic 110-kDa human mitochondrial protein, *Histochem J*, 30(9):617-25 1998.

For research use only. Not for use in human diagnostics or therapeutics.

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