



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone (800) 325-5832 (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

MONOCLONAL ANTI-MITOCHONDRIAL p110 CLONE 2G2

Purified Mouse Immunoglobulin

Product Number **M 0560**

Product Description

Monoclonal Anti-Mitochondrial p110 (mouse IgG1 isotype) is derived from the 2G2 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a mouse immunized with recombinant full length human mitochondrial p110 protein. The antibody is purified from ascites fluid using Protein G chromatography.

Monoclonal Anti-Mitochondrial p110 recognizes the 110 kDa mitochondrial protein in human and monkey. It may be used to stain human mitochondria by immunofluorescence and to label the p110 protein in immunoblotting. The antibody does not detect a mitochondrial protein in mouse, rat or chicken cells.

p110 has an approximate isoelectric point of 6.5 and co-partitions with HSP-60 proteins during isolation of mitochondria from HeLa cells. 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. 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 anemia 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.

Reagent

Monoclonal Anti-Mitochondrial p110 is supplied as a solution in phosphate buffered saline, pH 7.4, containing 0.08 % sodium azide.

Protein concentration is approximately 1 mg/ml.

Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution.

Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

For continuous use, store at 2 °C to 8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

A recommended working concentration of 2 µg/ml to 10 µg/ml is determined by immunoblotting.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

1. Paulin-Levasseur, M., et al., The 2G2 antibody recognizes an acidic 110-kDa human mitochondrial protein. *Histochem. J.*, **30(9)**, 617-625 (1998).

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