SANTA CRUZ BIOTECHNOLOGY, INC.

# Mitochondrial Inner Membrane (3H2248): sc-71589

## BACKGROUND

Mitochondria are eukaryotic organelles that convert organic materials into energy in the form of ATP via the process of oxidative phosphorylation. Mitochondria also play important roles in apoptosis, cellular proliferation, regulation of the cellular redox state, heme and steroid synthesis and glutamate-mediated excitotoxic neuronal injury. A typical cell has hundreds to thousands of mitochondria, each of which contain their own sets of DNA. Mitochondria also have unique proteins that can be used as mitochondrial markers. Several mitochondrial proteins are expressed in specific locations, such as the inner membrane. These proteins can be used as mitochondrial development markers. Cristae are the internal compartments formed by the inner membrane of a mitochondrion. They are studded with proteins responsible for the oxidation reactions of the respiratory chain, the manufacturing of ATP, the movement of metabolites into and out of the mitochondrial matrix, and the importation of proteins.

## REFERENCES


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## SOURCE

Mitochondrial Inner Membrane (3H2248) is a mouse monoclonal antibody raised against mitochondrial inner membranes of human origin.

## PRODUCT

Each vial contains 500 µl culture supernatant containing $IgG_{2a}$ with < 0.1% sodium azide.

## APPLICATIONS

Mitochondrial Inner Membrane (3H2248) is recommended for detection of an antigen expressed on the inner membrane of mitochondria of mouse, rat and human origin by immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200).

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.