

## QuickMito™ Stain

Mitochondria are rod-shaped organelles that can be considered the power generators of the cell, converting oxygen and nutrients into adenosine triphosphate (ATP). ATP is the chemical energy "currency" of the cell that powers the cell's metabolic activities. This process is called aerobic respiration and is the reason animals breathe oxygen. Without mitochondria (singular, mitochondrion), higher animals would likely not exist because their cells would only be able to obtain energy from anaerobic respiration (in the absence of oxygen), a process much less efficient than aerobic respiration. In fact, mitochondria enable cells to produce 15 times more ATP than they could otherwise, and complex animals, like humans, need large amounts of energy in order to survive.

QuickMito™ is a highly selective wash-free fluorescent probe for staining mitochondria. It binds to all variants of Mitochondria in many different species of cells. QuickMito™ can be used with sample types such as formaldehyde-fixed and living cell imaging experiments.

Absorbance: 500-700nm ; peak 525nm;

Emission: 530-700nm ; peak 586 nm.

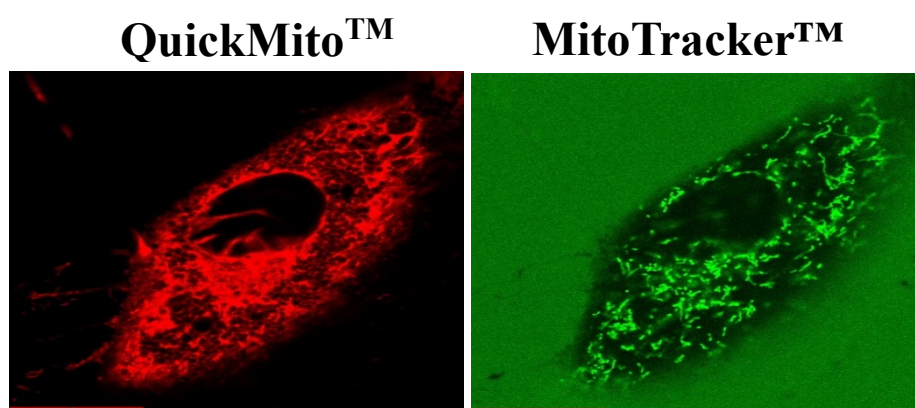


Figure. QuickMito™ specifically stains mitochondria with a wash-free manner.

### Reference:

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4. Karbowski M, Youle R (2003) Dynamics of mitochondrial morphology in healthy cells and during apoptosis. *Cell Death Differ* 10: 870–880
5. Masanta G, Heo C, Lim C (2012) A mitochondria-localized two-photon fluorescent probe for ratiometric imaging of hydrogen peroxide in live tissue. *Chem Commun* 48:3518–3520
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