

# New VectaCell™ Products

For live cell imaging

Whereas immunofluorescence staining gives a snapshot of a cell or tissue at a specific time point, live cell imaging allows the observation of biological processes over a period of time. This is important for studying biological functions, interactions, and structures in various applications (e.g., the effects of drugs and other biomolecules).

VectaCell™ reagents enable and enhance live cell imaging studies. VectaCell™ Trolox Antifade Reagent reduces phototoxicity and photobleaching of reagents to increase cell viability and prolong signal. VectaCell™ Acridine Orange and VectaCell™ Rhodamine 123 reagents offer convenience and ease of use for visualizing different cellular components.

## VectaCell™ Trolox Antifade Reagent

VectaCell™ Trolox Antifade Reagent is an antifading additive for live cell imaging. VectaCell™ Antifade Reagent contains both Trolox and its oxidized form Trolox-quinone. This redox system reduces photobleaching and blinking during live cell imaging.

- Efficiently prevents formation of different reactive oxygen species such as singlet oxygen ( $^1O_2$ ), superoxide anion ( $O_2^-$ ) or hydrogen peroxide ( $H_2O_2$ )
- Has been shown to have a cytoprotective effect and low cytotoxicity for different cell lines
- Water soluble and cell permeable analog of Vitamin E
- Supplied as a convenient 100 mM stock solution

## VectaCell™ Acridine Orange

A fluorescent dye used to stain acidic organelles, such as lysosomes, autosomes or yeast vacuoles in live cells.

- At low pH (inside the organelles)—emits an orange fluorescence (peak at 590 nm)
- For optimal endosome visualization, use a blue light excitation (475 nm)
- Supplied as a convenient 1000x stock solution

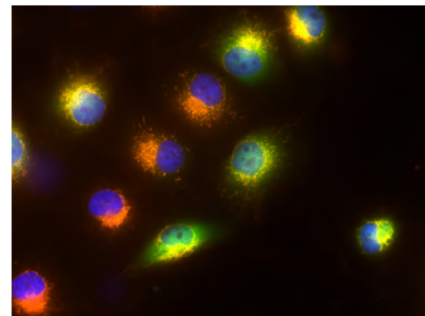
## VectaCell™ Rhodamine 123

VectaCell™ Rhodamine 123 is a fluorescent dye for staining active mitochondria. This dye accumulates in the mitochondrial membrane based on membrane polarization.

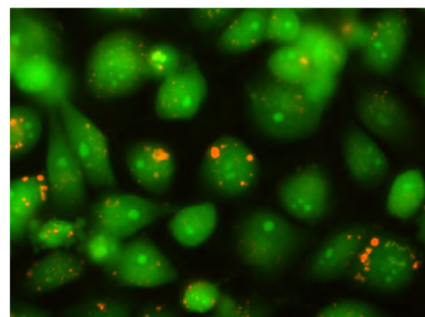
- Excitation peak at 505 nm
- Emission peak at 534 nm
- Supplied as a convenient 100x stock solution

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Mitochondria stained with VectaCell™ Rhodamine 123 (orange) in MCF-7 cells expressing GFP. Nuclei stained with DAPI (blue).



Acidic endosomes stained with VectaCell™ Acridine Orange in MCF-7 cells expressing GFP.

Product	Catalog Number
VectaCell™ Trolox	CB-1000
VectaCell™ Acridine Orange	CB-2000
VectaCell™ Rhodamine 123	CB-2100



Available in Canada from...

MJS  
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