

## Datasheet: ICT948

<b>Description:</b>	MITOCHONDRIAL MEMBRANE POTENTIAL KIT
<b>Name:</b>	MITOCHONDRIAL MEMBRANE POTENTIAL MitoPT™ TMRM KIT
<b>Format:</b>	TMRM Mitochondrial Stain (Red Fluorescence)
<b>Product Type:</b>	Kits
<b>Quantity:</b>	500 TESTS

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

#### Product Information

The MitoPT™ TMRM kit uses a quick and easy staining method to clearly differentiate between non-apoptotic and apoptotic cells through mitochondrial functionality.

#### Test Principle

An early indication of apoptosis involves a collapse in the electrochemical gradient across the mitochondrial membrane. Loss of mitochondrial membrane potential can be detected by a unique fluorescent cationic dye known as TMRM (tetramethylrhodamine methyl ester), that has been incorporated into the MitoPT™ TMRM kit.

The MitoPT™ TMRM reagent easily penetrates cells and enters the mitochondria. It aggregates in the mitochondria of non-apoptotic cells and fluoresces bright orange/red, whilst in apoptotic cells it diffuses throughout the cell. Once dispersed, the reagent assumes a monomeric form and exhibits a reduced orange/red fluorescence level. This allows an easy distinction between apoptotic and non-apoptotic fluorescent cells which can be read with a flow cytometer, fluorescence microscope or a fluorescence plate reader using black microtitre plates.

#### Reagents In The Kit

MitoPT™ TMRM Reagent - lyophilized - to make up 1mM stock  
 10X Assay Buffer, 125mL  
 600uL vial 50mM Carbonylcyanide m - chlorophenylhydrazone (CCCP) concentrate in DMSO.

<b>Instructions For Use</b>	Instructions for use can be found at <a href="http://www.bio-rad-antibodies.com/uploads/IFU/IFUICT948.pdf">www.bio-rad-antibodies.com/uploads/IFU/IFUICT948.pdf</a>
<b>Storage</b>	<p>Store the unopened kit (and each unopened component) at -20°C until the expiration date. Protect the MitoPT™ TMRM reagent from light at all times.</p> <p>Once reconstituted, the 1mM MitoPT™ TMRM stock should be stored at -20°C protected from light.</p>
<b>Guarantee</b>	Guaranteed until date of expiry. Please see product label.
<b>Acknowledgements</b>	MitoPT™ is a trademark of Immunochemistry Technologies, LLC.
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #20300 #10474 #10479 available at: MitoPT™ TMRM Reagent (20300): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/20300.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/20300.pdf</a></p> <p>10X Assay Buffer (10474): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10474.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10474.pdf</a></p> <p>CCCP Reagent (10479): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10479.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10479.pdf</a></p>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

[MITOCHONDRIAL MEMBRANE POTENTIAL KIT \(ICT946\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
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