

Datasheet: ICT946

BATCH NUMBER 167204

Description:	MITOCHONDRIAL MEMBRANE POTENTIAL KIT
Name:	MITOCHONDRIAL MEMBRANE POTENTIAL MitoPT™ TMRE KIT
Format:	TMRE Mitochondrial Stain (Red Fluorescence)
Product Type:	Kits
Quantity:	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.

	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™ TMRE 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 TMRE (tetramethylrhodamine ethyl ester), that has been incorporated into the MitoPT™ TMRE kit. The MitoPT™ TMRE 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™ TMRE Reagent - lyophilized - to make up 1mM stock
 10x Assay Buffer, 125ml (x2)
 600uL 50mM carbonyl cyanide m-chlorophenylhydrazone (CCCP) concentrate in DMSO.

