MTS Cell Proliferation Assay Kit

User Manual

Catalog # CAK2009

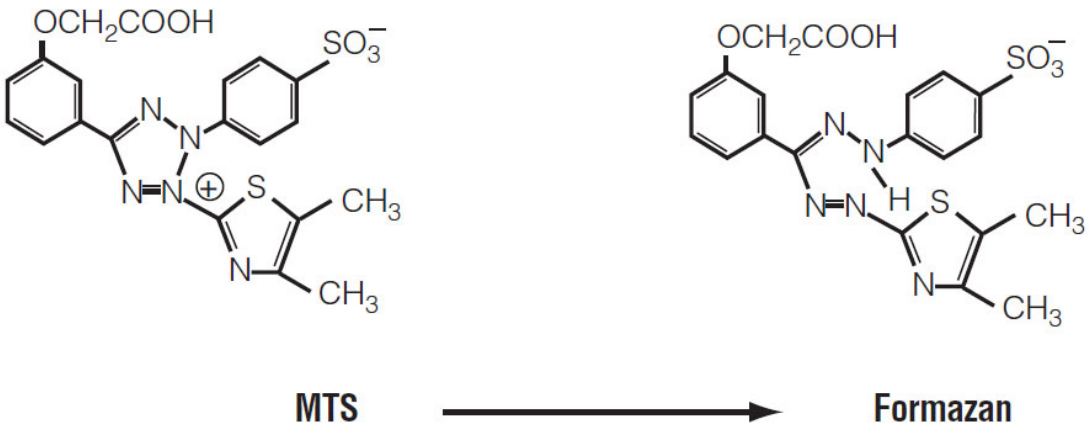
(Version 1.1B)

Quantification of viable cells in proliferation and cytotoxicity assay.

For research use only. Not for diagnostic or therapeutic procedures.

I. INTRODUCTION

MTS Cell Proliferation Assay Kit is a colorimetric method for sensitive quantification of viable cells in proliferation and cytotoxicity assay. The method is based on the reduction of MTS tetrazolium compound by viable cells to generate a colored formazan product that is soluble in cell culture media. This conversion is thought to be carried out by NAD(P)H-dependent dehydrogenase enzymes in metabolically active cells. The formazan dye produced by viable cells can be quantified by measuring the absorbance at 490 nm. MTS assay is performed by adding the reagent directly into the cell culture media without the intermittent steps, which are required in the routine MTT assay. In addition, this high-throughput assay requires no washing or solubilization step and can be performed in 96-well microtiter plate.



II. KIT COMPONENTS

Component	500 Assays	Storage
MTS solution	5 ml x 1	4 °C
Manual	1	--

III. MATERIALS REQUIRED BUT NOT PROVIDED

1. Multi-well spectrophotometer (ELISA reader)
2. Sterile, tissue culture treated, clear bottom 96-well microplates
3. Multichannel pipette

IV. ASSAY PROCEDURE

1. Culture cells (5-100 x 10^3/well) in a 96-well microtiter plate in a final volume of 100 µl/well in the absence or presence of various factors to be tested.

2. Incubate cells for 20-48 hours.

3. Add 10 µl/well MTS Solution into each well & incubate for 0.5-4 hours at 37°C in standard culture conditions.

Notes:

a) If the cells are cultured in different volume of culture medium, adjust the amount of MTS Reagent accordingly.

b) The appropriate incubation time depends on the individual cell type and cell concentrations used. Therefore, it is recommended to determine the optimal incubation time for a particular experiment.

4. Shake the plate briefly on a shaker & measure absorbance of treated and untreated cells using a plate reader at 490 nm.

V. STORAGE/STABILITY

For long-term storage, store kit at -20°C, protected from light. For frequent use, kit can be stored at 4°C for up to 4 weeks, protected from light.

VI. TECHNICAL SUPPORT

For troubleshooting, information or assistance, please go online to www.cohesionbio.com or contact us at techsupport@cohesionbio.com

VII. NOTES