



WST-1 Cell Proliferation Assay Kit

Item No. 10008883

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GENERAL INFORMATION

Materials Supplied

Item Number	Item	96 Well Quantity/Size	480 Well Quantity/Size	Storage
600485	WST-1 Developer Reagent	1 vial/600 µl	5 vials/600 µl	-20°C
10010354	Electron Mediator Solution	1 vial/600 µl	5 vials/600 µl	-20°C

If any of the items listed above are damaged or missing, please contact our Customer Service department at (800) 364-9897 or (734) 971-3335. We cannot accept any returns without prior authorization.



WARNING: THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Safety Data

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

Precautions

Please read these instructions carefully before beginning this assay.

If You Have Problems

Technical Service Contact Information

Phone: 888-526-5351 (USA and Canada only) or 734-975-3888

Fax: 734-971-3641

E-Mail: techserv@caymanchem.com

Hours: M-F 8:00 AM to 5:30 PM EST

In order for our staff to assist you quickly and efficiently, please be ready to supply the lot number of the kit (found on the outside of the box).

INTRODUCTION

About This Assay

Cayman's WST-1 cell proliferation assay provides a tool for studying induction and inhibition of cell proliferation in any *in vitro* model. The assay is based on the enzymatic cleavage of the tetrazolium salt WST-1 to formazan by cellular mitochondrial dehydrogenases present in viable cells. This kit will also allow investigators to screen drug candidates involved in regulation of cell cycle.

PRE-ASSAY PREPARATION

Reagent Preparation

WST-1 Mixture

Immediately before use, thaw the Electron Mediator Solution and WST-1 Developer Reagent. Combine equal volumes of Electron Mediator Solution with WST-1 Developer Reagent to make enough WST-1 mixture for the number of wells in your experiment and mix well.

If the entire volume will not be used in a single experiment, we recommend that you aliquot and store it at -20°C. When stored at -20°C, the WST-1 Mixture will be stable for several months. Avoid repeated freeze/thaw cycles.

ASSAY PROTOCOL

Procedure

1. Seed cells in a 96-well plate at a density of 10^4 - 10^5 cells/well in 100 μ l of culture medium with or without compounds to be tested. Culture the cells in a CO₂ incubator at 37°C for 24-48 hours.
2. Add 10 μ l of the WST-1 mixture to each well.
3. Mix gently for one minute on an orbital shaker.
4. Incubate the cells for two hours (adherent culture) to four hours (suspension culture) at 37°C in a CO₂ incubator.
5. Before reading the plate, it is important to mix gently on an orbital shaker for one minute to ensure homogeneous distribution of color.
6. Measure the absorbance of each sample using a microplate reader at a wavelength of 450 nm.

Example Data

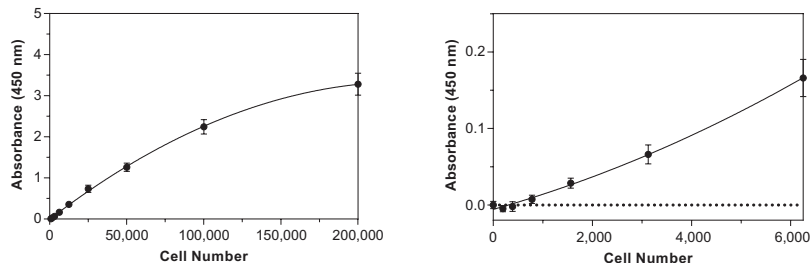


Figure 1: A typical cell titration experiment using HL-60 cells.

NOTES

Warranty and Limitation of Remedy

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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