WST-8 Cell Proliferation Assay Kit

Item No. 10010199

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Customer Service 800.364.9897
Technical Support 888.526.5351
1180 E. Ellsworth Rd · Ann Arbor, MI · USA

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GENERAL INFORMATION

Materials Supplied

Kit will arrive packaged as a -20°C kit. For best results, remove components and store as stated below.

Item Number	Item	96 Well Quantity/Size	480 Well Quantity/Size	Storage
600487	WST-8 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

Email: 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-8 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 extracellular reduction of WST-8 by NADH produced in the mitochondria resulting in a water-soluble formazan which dissolves directly into the culture medium. Cayman's WST-8 assay is preferred when higher cell densities are expected, as up to 5 x 10^6 cells/ml can be successfully quantified.

PRE-ASSAY PREPARATION

Reagent Preparation

WST-8 Mixture

Immediately before use, thaw the Electron Mediator Solution (Item No. 10010354) and WST-8 Developer Reagent (Item No. 600487). Combine equal volumes of Electron Mediator Solution with WST-8 Developer Reagent to make enough WST-8 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-8 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 µl of culture medium with or without compounds to be tested. Culture the cells in a CO_2 incubator at 37°C for 24-48 hours.
2. Add 10 µl of the WST-8 Mixture to each well using a repeating pipettor.
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 CO_2 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.

Sample Data

An example of typical data obtained with this assay is shown in the figure below. Your data will vary depending on the cell line and culture conditions used.

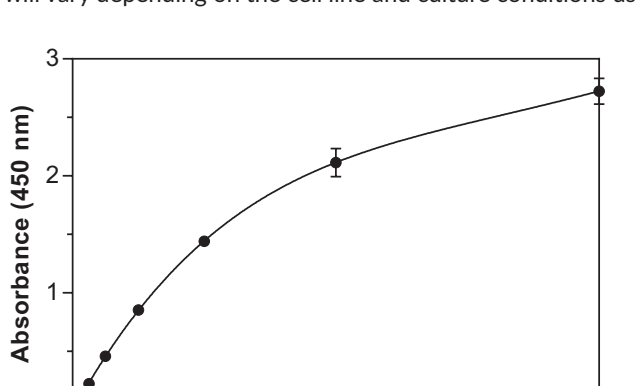

Figure 1: A typical cell titration experiment using Jurkat cells.

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.