General Protocol

ToxReady™ Plates

CRYOLOGYX

Simplifying and accelerating cell-based assays

ToxReady™ HepG2 96 Well Plates

General thaw-and-use protocol to prepare ToxReady™ HepG2 96 well plates for any assay.

REF: HPG20096PSCLLOW, HPG20096PSCLMID, HPG20096PSCLHIG

Introduction

ToxReady™ HepG2 96 well plates remove the need for routine cell culture by offering HepG2 cells cryopreserved adhered onto a 96 well plate. Simply store the well plates in a -80 °C freezer until they're required for use.

This protocol outlines the simple steps necessary to ensure the optimal revival of HepG2 cells in ToxReady™ HepG2 96 well plates, making them assay-ready 24 hours post-thaw. Once thawed, ToxReady™ HepG2 96 well plates can be used for any subsequent application. Application notes are available for specific assay protocols.

ToxReady™ HepG2 96 well plates are provided in three confluency levels, low (20 – 30%), medium (40 – 60 %) and high (>70%) to ensure compatibility with all major assays. Select the confluency level based on the desired protocol.

Storage

Store in a -80 °C freezer. Use by expiry date.

Not Included

Component	Quantity	Description	Storage
Minimum Essential Medium Eagle	500 mL	Base medium (e.g., Merck M4655)	4°C
Fetal Bovine Serum	50 mL	Growth supplement (e.g., Merck F7524)	-20°C
Antibiotic-Antimycotic (100x) (optional)	5 mL	Contamination prevention (e.g., Thermo Fisher 15240062)	-20°C
Non-essential amino acids (100x)	5 mL	Growth supplement (e.g., Merck M7145)	4°C

Prepare in Advance

- Complete Eagle's Minimum Essential Medium:

1. Remove 60 mL of Eagle's Minimum Essential Medium
2. Add 50 mL of fetal bovine serum (final concentration 10%)
3. Add 5 mL of non-essential amino acids (final concentration 1%)
4. (optional) Add 5 mL of antibiotic-antimyotic (final concentration 1%)

- Pre-warm medium to 37 °C before removing plates from the -80 °C freezer.

Revision 2 Updated 24-08-2023

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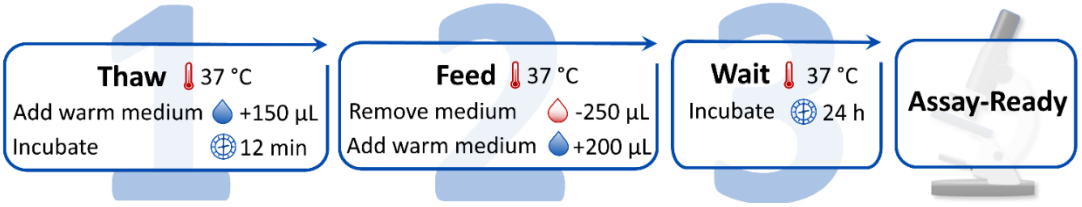
Procedure



Method

1.1 Remove no more than 3 x ToxReady™ HepG2 96 well plates from the -80 °C freezer.

1.2 Remove protective film and add 150 µL of warm complete cell culture media (warmed to 37 °C) to every well.

1.3 Place the plates in an incubator set at 37 °C and 5% CO_2 for 12 mins to allow the cells to thaw. Do not stack the plates.

1.4 Remove the plate from the incubator and ensure that the cells have completely thawed.

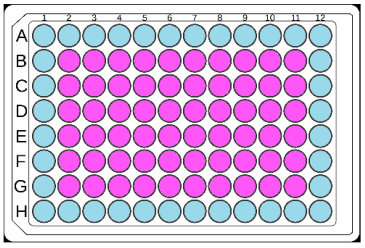
Note: To confirm this, no ice should be present at the bottom of the wells. If there is, return to the incubator until completely thawed.

2.1 Remove the medium + cryoprotectant solution (250 µL)

2.2 Add 200 µL of warm complete cell culture media (warmed to 37 °C).

3.1 Place the plates in an incubator set at 37 °C and 5% CO_2 for 24 hours.

Cells are ready for use in all major assays. No cells are present in rows A and H and columns 1 and 12 (highlighted blue) to avoid assay edge effects.



Notes

For additional product information please consult the product specification document an certificate of analysis. FAQs and Assay Ready protocols can be found at www.cryologyx.com under the resources section.

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