

## Corning® 3D Spheroid-qualified Primary Human Hepatocytes

Catalog Number	454552
Lot Number	393A
Quantity / Package	1.5 mL
Storage Conditions	Liquid Nitrogen Vapor Phase
Manufacturing Date (MONTH/DAY/YEAR)	10/14/2014
Application(s)	3D Primary Human Hepatocyte Spheroid Culture

### Additional Information

- Refer to the "Corning® 3D Spheroid-qualified Primary Human Hepatocytes – Instruction for Use" for instruction on establishing primary human hepatocyte spheroid cultures

### Safety Information

- Chemical hazard assessment indicates this product is not hazardous, therefore no SDS (Safety Data Sheet) is provided. Handle in accordance with good industrial hygiene and laboratory safety practices.

### Hazard Warning

- This hepatocyte preparation was prepared from fresh human tissue. The donor for the tissue used to prepare this material has been tested for pathogens by serological and PCR based testing. Testing results may be found in tables below.
- Treat all products containing human derived materials as potentially infectious, as no known test methods can offer assurance that products derived from human tissues will not transmit infectious agents.
- All persons handling human hepatocytes must use Universal Precautions in accordance with the US OSHA Bloodborne Pathogens Final Standard and/or the European Council Directive on the protection of workers from risks related to exposure to biological agents at work (90/679/EEC) and it's relevant European National Transpositions.

### Donor Information

Specimen	Results
Donor Number	HFC1047
Gender	Female
Age	29 years
Race	Caucasian
Cause of Death	Anoxia 2nd Drug Intoxication
Smoker	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N Cigarettes; 1 pack every day X 13 years.
Social History	ETOH (Alcohol) 1 X monthly, in adult life. Marijuana (Inhaled) rarely X 10 years as a teenager; Xanax (Ingested) daily X 3 years.
Medical History	HTN; Diagnosed 5-6 years ago- mostly compliant with medication. Memory loss within the last week d/t PTSD, meds she took caused the memory loss (no official Dx). Jaundice as an infant. HTN meds, Oxycodone, Fentanyl, Xanax, Vicodin, Paxil (Medications taken at home as reported by NOK). Dextrose, Heparin, (Administered in the hospital).

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### Results of Donor Serology Testing

HIV 1	HIV 2	HTLV 1	HTLV 2	HBcAb IgG	HBcAb IgM	HCV	CMV	RPR	EBV IgG	EBV IgM
		ND	ND				+		+	

ND= Not Done

### Results of PCR-Based Pathogenicity Testing

HIV 1	HIV 2	HTLV 1	HTLV 2	HBV	HCV	CMV
ND	ND	ND	ND	ND	ND	ND

ND= Not Detected

### 3D Primary Human Hepatocyte Spheroid Culture

- All 3D liver spheroid culture was carried on Corning 96-well Spheroid Microplates (Cat. No. 4515 or 4520).
- The seeding medium was supplemented William's E medium with 10% Fetal Bovine Serum (FBS).
- On day 0, cells were thawed quickly at 37°C using a thawing medium to ensure viability at greater than 75%.
- Cells were seeded at  $1 \times 10^3$  cells/well in 100µL seeding media and then centrifuged at 100g for 2 minutes at room temperature.
- On day 1, spheroid culture was rotated on an orbital rotator at 450rpm for 5 minutes at room temperature and put back to culture.
- On day 2, spheroid culture was fed with 100µL/well using supplemented William's E medium (no FBS), then rotated at 450rpm for 5 minutes at room temperature and put back to tissue culture incubator.
- On day 5, spheroid culture was examined under microscope for monitoring spheroid formation, 100µL/well old medium was removed and 100µL/well fresh supplemented William's E medium was added.
- Half medium changes as described above were performed every 2 to 3 days for spheroid culture.
- Spheroid sizes (diameter, µm) and ATP levels (pmol/spheroid) were measured on day 7, 14, 21 and 28 in culture.

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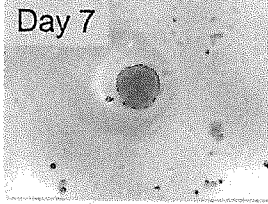
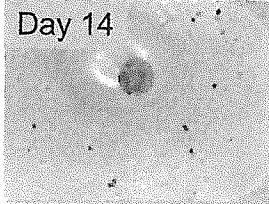
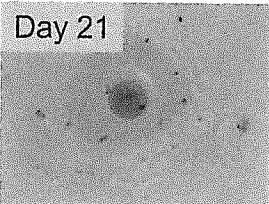
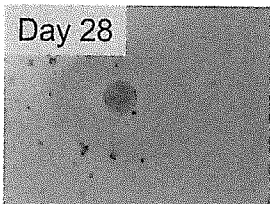
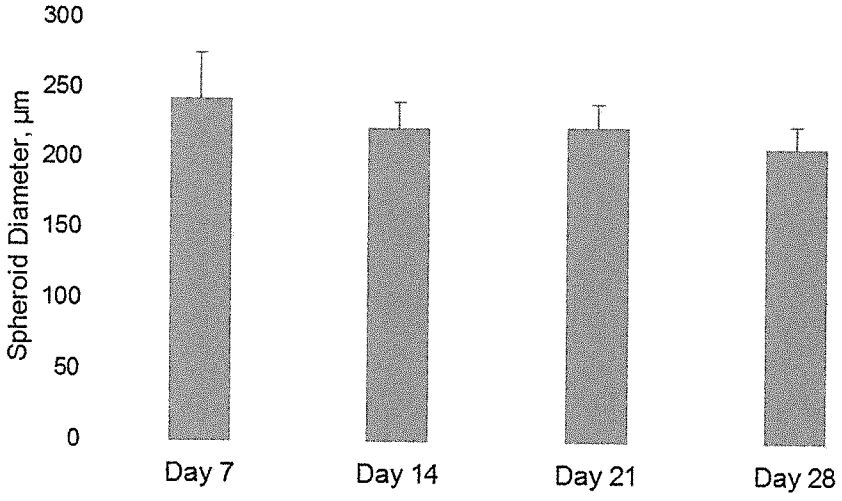
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### Results of primary human hepatocyte spheroid culture

<b>Thawing Results</b>	<b>Cell Viability (%): 77      Cell Recovery (10<sup>6</sup> cells per vial): 11.1</b>													
<b>Morphology</b>														
<b>Spheroid Size Measurement</b>	<p style="text-align: center;"><b>Lot 393A Spheroid Size Measurement</b></p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Spheroid Diameter Data</caption> <thead> <tr> <th>Day</th> <th>Spheroid Diameter (µm)</th> </tr> </thead> <tbody> <tr> <td>Day 7</td> <td>~240</td> </tr> <tr> <td>Day 14</td> <td>~220</td> </tr> <tr> <td>Day 21</td> <td>~220</td> </tr> <tr> <td>Day 28</td> <td>~200</td> </tr> </tbody> </table>				Day	Spheroid Diameter (µm)	Day 7	~240	Day 14	~220	Day 21	~220	Day 28	~200
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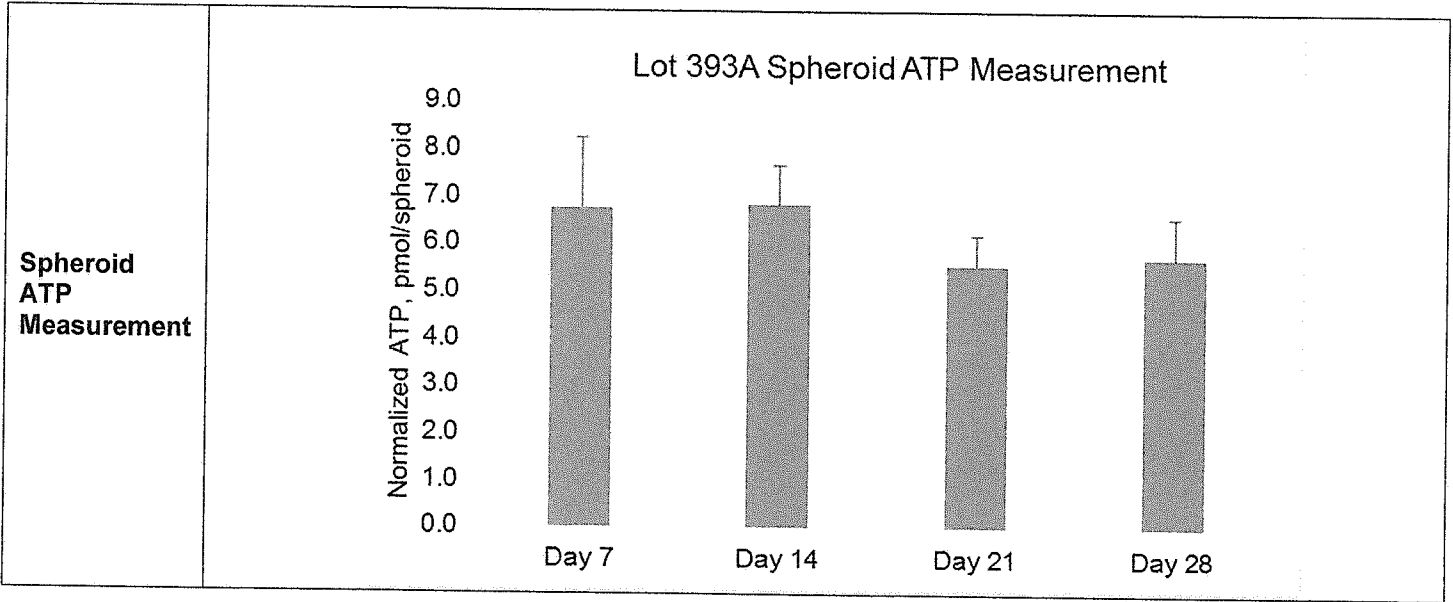
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*[Signature]*  
 Quality Assurance

*13 Nov, 2018*  
 Date

Revision History				
Rev.	Change No.	Description of Change	Revised By	Revised Date
1	CC 11257	Initial Release	Feng Li	10-30-2018