Approximately 2.5 x 10^24 to 36 hours after seeding, remove the cells from the incubator and view each multi well dishes or...

Prepare the desired combinations of culture dishes with application specific media (see Spiller, 2015)...

Add required volume of fresh, pre-warmed required growth media to the culture dishes...

Carefully remove the spent media without disturbing the monolayer.

Biosafety Level 2

Pre-warm required growth media in a 37°C water bath. This will take between 10 to 30 minutes, usually depending on the volume. If using a small volume of medium (50 mL or less), warm only the volume needed in a sterile conical tube. Avoid warming complete growth media multiple times.

2. 24 to 36 hours after seeding, remove the cells from the incubator and view each multi well dishes or flasks under the microscope using 20x or 40x objective for the attachment and morphology.

Carefully remove the spent media without disturbing the monolayer.

3. Add required volume of fresh, pre-warmed required growth media to the culture dishes...

Refer to the Certificate of Analysis for batch-specific test results.

SAFETY PRECAUTION

ATCC highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris.

Handling Procedure for Flask Cultures

1. Pre-warm required growth media in a 37°C water bath. This will take between 10 to 30 minutes, depending on the volume. If using a small volume of medium (50 mL or less), warm only the volume needed in a sterile conical tube. Avoid warming complete growth media multiple times.

2. 24 to 36 hours after seeding, remove the cells from the incubator and view each multi well dishes or flasks under the microscope using 20x or 40x objective for the attachment and morphology.

3. Carefully remove the spent media without disturbing the monolayer.

4. Add required volume of fresh, pre-warmed required growth media to the culture dishes...

ATCC ACS-7010

ATCC ACS-7020

Propagation

Refer to the batch specific information for the total number of viable cells.

1. Using the total number of viable cells, customers have to decide seeding for their experiments and applications (see Spiller, 2015).

2. Prepare the desired combinations of culture dishes with application specific media (see Spiller, 2015). Place dishes in a 37°C, 5% CO_2, humidified incubator and allow the media to pre-equilibrate to temperature and pH for 30 minutes prior to adding cells.

3. While the culture dishes equilibrate, remove one vial of iPSC-derived Monocytes (ATCC® ACS-7030) from storage and thaw the cells in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 1 to 2 minutes).

4. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All operations from this point onward should be carried out under strict aseptic conditions.

5. Add 4ml of RPMI 1640 (ATCC 30-2001) with or without 10% FBS (ATCC 30-2020) or complete growth media for specific applications – into a sterile conical tube. Using a sterile pipette, transfer cells from the cryovial to the conical tube. Centrifuge at 200-300 x g for 5 min, remove supernatant and re-suspend the pellet in required medium and take an aliquot for cell counting using Vi-cell.

6. Transfer cell suspension to each of the pre-equilibrated culture dishes in the required seeding density depending the application and gently rock each dishes to evenly distribute the cells.
7. Place the seeded culture flasks in the incubator at 37°C with a 5% CO₂ atmosphere. Incubate for at least 24 hours before processing the cells further.

**Maintenance**

1. Pre-warm required growth media in a 37°C water bath. This will take between 10 to 30 minutes, depending on the volume. If using a small volume of medium (50 mL or less), warm only the volume needed in a sterile conical tube. Avoid warming complete growth media multiple times.
2. 24 to 36 hours after seeding, remove the cells from the incubator and view each multi-well dishes or flasks under the microscope using 20x or 40x objective for the attachment and morphology.
3. Carefully remove the spent media without disturbing the monolayer.
4. Add required volume of fresh, pre-warmed required growth media to the culture dishes and return the dishes to the incubator or use it for assays.

**Cryopreservation**

N/A: As this cell line is intended to be consumable no sub culturing and no cryopreservation is recommended.

**References**

References and other information relating to this product are available online at www.atcc.org.

**Use Restrictions**

These cells are distributed for research purposes only. ATCC recommends that individuals contemplating commercial use of any cell line first contact the originating investigator to negotiate an agreement. Third party distribution of this cell line is discouraged, since this practice has resulted in the unintentional spreading of cell lines contaminated with inappropriate animal cells or microbes.

**Biosafety Level: 2**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the Biosafety in Microbiological and Biomedical Laboratories from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

**ATCC Warranty**

The viability of ATCC® products is warranted for 30 days from the date of shipment, and is valid only if the product is stored and cultured according to the information included on this product information sheet. ATCC lists the media formulation that has been found to be effective for this strain. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this strain. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.

**Disclaimers**

This product is intended for laboratory research purposes only. It is not intended for use in humans.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of strains on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of cultures.

Please see the enclosed Material Transfer Agreement (MTA) for further details regarding
Product Sheet

iPSC-derived Monocytes; DYS0100 (ATCC® ACS-7030™)

Please read this FIRST

Storage Temp.
liquid nitrogen vapor phase

Biosafety Level
2

Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: iPSC-derived Monocytes; DYS0100 (ATCC® ACS-7030™)